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# GENESEE FARMER:

A MONTHLY JOURNAL DEVOTED TO

## AGRICULTURE & HORTICULTURE,

### DOMESTIC AND RURAL ECONOMY.

ILLUSTRATED WITH NUMEROUS ENGRAVINGS OF

DOMESTIC ANIMALS, FRUIT AND ORNAMENTAL TREES,

IMPLEMENTS, SHRUBS, FLOWERS, &c.

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No. 1

### WALKS AND TALKS ON THE FARM.—NO. 13.

I WAS plowing on the 6th of December. The weather was as mild as May, and the land turned up as mellow as could be desired. One of my weather-wise neighbors said we should have no snow this winter, and but little frost. The next day a severe storm set in, and before morning it turned to snow, and when I went to bed that night the thermometer was only 6° above zero! Winter set in grimly and in earnest. The plows were still out in the field, but I told the men to get them in. We have plowed our last furrow. We have dug our last ditch. The campaign of 1864 is ended. We have gone into winter quarters.

The operations of the year have not been very successful. Those farmers who had their land in a high state of cultivation, and well stocked, have made money; but it has been a poor year for poor farmers. Let us hope for a better season next year, and above all let us make up our minds to "farm better." If I were a good talker, I would stump Western New York this winter in favor of "high farming." The war will make great changes in our agriculture. We shall have better prices, and *good* farmers will make money.

Some of the agricultural papers are discussing the question whether farmers ought to work or not! It is seldom that a farmer succeeds in this country who does not labor more or less with his own hands. It is so difficult to get men who can perform even the most ordinary agricultural operation, without some one to think for them and instruct them in the minutest details, that unless the farmer is with them nearly all the time little will be accomplished. The main item of expense on a farm is for labor, and this must be made as efficient as possible, or no money can be made by farming. How to get the most work done, is the question. On a large farm, where a good many men are employed, the farmer will have enough to do to keep things in order, without working himself. But on a small farm he must work with his hands as well as his head. For my own part, I like to work, but

I always think that I ought to be doing something else. It is a real luxury to take hold of the plow or the hoe, and in mere mechanical labor forget the cares and anxieties which so constantly oppress us. It is a luxury, however, that a large farmer cannot afford. In the winter season, when he has fewer men, he can work more himself; and if he attends to his stock, they will come out in the spring far better than if left to other hands. It is almost impossible to get any one to feed stock regularly and with judgment. The farmer, if he does not do the whole work himself, must at all events give it his daily personal attention.

"Should stock be fed two or three times a day?" was a question discussed pretty thoroughly in the *Genesee Farmer* a few years since. Some facts were mentioned which seemed to show that the oftener animals were fed, the better. I think animals should be fed at least three times a day. During these short days it is very important that they should be fed early in the morning. And I think the English practice of "supping up" at night might be introduced with advantage. In an English country village the church bell rings at eight o'clock in the evening, and the men turn out to feed, water and bed-down their horses and cows for the night. It rings again at five o'clock in the morning, when the men are expected to get up and attend to their horses.

To those who are as short of straw as I am, there is a decided advantage in not bedding down the horses till eight o'clock. They will not use up more than half as much straw as when bedded down at dark. Horses that work, also need a little feed and water at eight o'clock, and by adopting this practice of "supping up," you see that all is right for the night.

The great point, however, is to get them attended to early in the morning. Perhaps, in this severe cold weather, five o'clock is a little too early to "turn out," but by half-past five, at least, the horses should be fed and watered, and the stable cleaned. Then go to breakfast, and by the time you are through, it will be light enough to see to fodder the



sheep, cows, &c. When this is done let the horses have a good cleaning, and be ready to go to work at half-past seven.

The want of profitable employment for horses in winter is a great drawback in American agriculture. On grain farms we have to keep a pretty large force to get the plowing done in good season, and consequently on a large farm we need more horses than can be employed in winter. Feed is so high that we can hardly afford to let a horse lie idle all winter, even if he eats little else than straw. I mean to keep my horses busy drawing wood. I have one of Remingtons' new Horse Powers, with a drag-saw attachment. I put it in the woods, and saw the logs into 16-inch lengths. It will saw off a log two feet through in less than two minutes. In the city they charge from \$2 to \$3 a cord for sawing and splitting wood, and it would seem that the work can be done cheaper than that in the woods with a good drag saw. It is more work to handle the wood when sawed and split, but I think it will pay. At all events I mean to try it. Good hard wood brings \$12 a cord in the city, and it costs at least \$2 more to saw and split it. Fourteen dollars a cord! With food and clothing correspondingly high, it will be a trying winter for the poor.

War is always hard on the poor. Wages do not keep pace with the advance in prices. As compared with other countries, wages have hitherto been so high that a slight reduction, as compared with the price of food, would have been no great hardship. But the truth is that the demand for labor and high wages have induced an extravagant style of living, which no country that keeps a large army in the field can long sustain. We must be more economical. But I am well aware that no people, as a whole, ever practice economy till it is forced upon them. Most men spend all they get. An Irishman who got \$1.50 a week in Ireland, managed to live and bring up a large family. Here the same man gets \$10 a week, but spends the whole, and will tell you just as feelingly as ever that he cannot possibly live on less.

Count Rumford once remarked that "the number of inhabitants who may be supported, in any country, upon its internal produce, depends almost as much upon the art of *cookery* as upon that of *agriculture*."

Instead of drinking a decoction of burnt peas and chicory, sold under the name of coffee, would it not be better for a hard-working man to take a good bowl of pea or bean soup for breakfast? He need not confine himself to this, but it would certainly be more nutritious and far cheaper than coffee. The Scotchman with his oatmeal and milk is just as hearty and healthy as the American with his pork,

hot cakes, molasses and "fixings." A French family, with their skill in making savory soup, will live on what an Irish-American family wastes.

Pork is the most expensive meat we can now eat. Mutton is the cheapest. Pork costs 20 cents a pound by the barrel, while mutton can be bought for 5 cents a pound. If fat, it is almost as nutritious as pork, and if the "broth" in which the mutton is boiled is used, it will go nearly as far. But we need good cookery to make it savory.

It is very pleasant to let the imagination dwell on the big crops which we are going to raise next year! Calculating the wheat at 30 bushels per acre; the barley at 40 bushels; oats at 60 bushels; corn at 75 bushels; potatoes at 200 bushels, and other crops in proportion, how easy it is to figure up very respectable profits! No good farmer ought to be satisfied with less than these yields, but how few succeed in obtaining them? The average is not more than one-half. I have not much faith in getting rich by raising crops which, like tobacco, onions, &c., occasionally afford immense profits. A regular system of agriculture, steadily pursued, is the surest road to success.

I intend to set out some turnips for seed next spring, not so much because at the present high price of seed it can be grown with considerable profit, but from the difficulty of getting pure seed from well-selected bulbs. I have never raised any turnip seed, and do not know what is considered a good crop. Stephens, in his *Book of the Farm*, says 1,500 pounds per acre is "a very moderate crop of turnip seed." Last year it was sold at the seed stores in the city at \$1 per pound. At this rate it must be a profitable crop to grow. I wish some one who has had experience [in raising it in this country would write an article on the subject.

"The destruction of the poor is their poverty." How true this is in agriculture. Many farmers have not capital enough to construct even sheds for their cattle and sheep, and the result is that they lose nearly half the benefit of the food. They are too poor to be economical. How few farmers have properly arranged buildings, and they have to do all their work at arms' length. I was reading an article the other day from a correspondent of the *Irish Farmers' Gazette*, complaining of the action of the banks in not loaning money to farmers for a longer period than three months. He thought that as farmers were the mainstay of the country, and that as anything which injured them injured all other classes, this want of discrimination on the part of the banks was one reason why Ireland did not keep pace with England and Scotland in agricultural and na-



tional prosperity. Be this as it may, there can be no doubt that the want of capital is a serious impediment to agricultural improvement.

High as everything is, there can be little doubt that it will still pay to spend more money in farming. I would not spend it in building if it could be avoided, but in working the land more thoroughly and in draining and manuring. It seems to me that the capital of the country is being rapidly withdrawn from agriculture and other productive occupations. The gold-interest-bearing Government bonds, with the present premium on gold, pay 14 per cent., and besides are tax free. No ordinary business can pay such a rate of interest, to say nothing of the heavy taxes. It is no wonder, therefore, that capital is leaving the farm and the workshop, and that those who take a comprehensive view of the matter are becoming alarmed. One thing seems certain: those farmers who have capital to spare, or who can command it, would do well to expend it in judicious improvements on their farms rather than to engage in outside speculations.

There is a wide-spread conviction that "farming does not pay." Hitherto it has not been a very lucrative business, though the returns have been sure. If I mistake not, good farming will for a few years to come be more profitable than ever before. The very fact that so much capital is being diverted from agriculture, will insure better returns to those who have sufficient confidence to invest their money in improving their farms.

I told one of my men to give the chickens some boiled potatoes, mashed up with a little corn meal, and to feed it to them warm. He assured me that *warm food would kill them!* On speaking to some others on the subject, I found that it was a common opinion that warm food would injure fowls in winter. It seems hardly possible that there can be the least foundation for such a notion—other than this, that if you give them the food *too hot* they have not sense enough to wait till it gets cool, but will scald their mouths with it. Bement says:

"Potatoes are, according to our experience, a cheap, wholesome and nutritious food for fowls. If fed alone, without grain, they are very apt to make them scour. And we have found it indispensable, not only to feed them in a boiled state, but *hot*; not too hot, however, as they are so stupid as to burn their mouths if permitted. It is likewise necessary to break the potatoes a little, for they will not unfrequently leave a potato when thrown down unbroken; taking it, I presume, for a stone, since the moment the skin is broken, and the white of the interior is brought into view, they will pounce upon it greedily.

"Fowls are not fond of raw potatoes, beets, carrots

or parsneps, though they will sometimes eat them when cut into very small pieces. Boiled vegetables, mashed up with bran or meal, are excellent food for poultry, and answer well for their evening meal when grain has been given them in the morning."

M. Reaumur made some experiments to ascertain whether it was better to cook grain for fowls or to feed it dry. He found that as a general rule fowls prefer boiled grain to raw, though sometimes they eat the dry grain in preference. The better way is to give them cooked food and a little dry grain in addition. He found more advantage in cooking Indian corn than any other grain.

The editor of the *Farmers' Journal* mentions an experiment which is directly to the point. He says:

"We had a lot which were supplied with grain, water and gravel, in the cold season. They did not lay till the latter part of February—they were old hens. The next winter, in addition to grain, we gave them warm food of potatoes, meal, &c., a fresh lot of gravel every week, and pounded bones and oyster shells, and care was taken to keep the hen-house clean. In January, the second winter, the same hens laid abundantly. The eggs were worth three times as much as the food consumed."

Keep hens warm and clean, with plenty of food and an occasional scrap of meat, fish, &c., and they will furnish all the eggs you want in winter. One common error is keeping the hens in a dark poultry house. They must have light or they will not lay.

Contrary to the general opinion, it seems there has been more wool imported into this country during 1864 than in 1863. It was thought that the high premium on exchange and the enhanced duties would stop the importation of all foreign wool, except that of the lowest grades. But it seems such is not the case. The duty on low-priced wool is very light as compared with that on finer qualities. And it is said that fine wool is imported in a dirty condition, or even with sand sifted through it, so as to reduce its value per pound to the price of wool which is charged the lowest duty.

In the last *Mark Lane Express* there is an article on "The Great Wool Supply Question." It seems that the amount of wool sent to England from Australia up to September 30 this year, was 84,919,645 pounds; while for the whole of 1863 it was only 77,173,446 pounds. In 1862, it was, in round numbers, 71,000,000 pounds; in 1861, 68,000,000; in 1860, 59,000,000; in 1859, 53,000,000; in 1858, 51,000,000; and in 1857, 49,000,000 pounds.

In 1839 there were only 35,879,171 pounds of wool imported from Australia. This year it is thought it will reach 100,000,000 pounds. The *Mark Lane Express* says: "To put the matter in another light—the entire imports of wool into Great Britain in 1854



were 81,612,732 pounds; in 1864, Australia alone will supply 100,000,000 pounds. The great secret of the prodigious expansion in the wool-producing resources of the Australias is the immense sums paid to them for wool. Thus in the first eight months of 1864 the value of the Australian wool imported was £6,962,807, against £4,660,741 in the corresponding period of 1863, and £4,646,745 in the corresponding period of 1862. In other words, we have been paying our Australian friends £870,351 per month for their wool this year; and as our figures show, money is making the mare to go with a vengeance." The effect of high prices in stimulating the production of wool is also seen in this country. In 1850, according to the United States census, the production of wool in the United States and Territories was 52,516,959 pounds, and in 1860, 60,264,913 pounds. But according to the report of the Commissioner of Agriculture for 1863, just published, the production of wool in 1862 was 63,524,172 pounds, and in 1863, 79,405,215.

The scarcity of cotton and the high premium on gold alone keep up the price of wool. As long as gold is over 200, there is not much probability of wool being any lower. But when things again assume their normal condition, the "sheep fever" will receive a sudden check—if not sooner.

The Commissioner of Agriculture says that the number of hogs in the United States was less in January, 1863, by nearly a million, than in 1859, and adds: "Great as this is, and much as it has influenced the prices of the hog product, yet the deficiency has become greater since January, when the returns were made to the department. The great scarcity of corn, and its high price caused farmers to abandon their young hogs last winter, and many perished. The present condition of the corn crop will not induce any great extension of hog-raising, and hence the products of the hog must command prices that cannot but make greater attention to this stock one of the highest sources of profit to the farmer."

Hogs can be increased so rapidly that as soon as pigs will afford a good profit they will be multiplied to any extent desired.

A farmer from Minnesota writes: "If you should come here and see the cattle exposed to our severe winters, you would contrive some plan to shelter them." There is no necessity of going to Minnesota to see cattle exposed to winter storms, without other protection than a rail fence. I have seen scores of such instances even in this State. If farmers realized the advantages of even a slight shelter for their cattle, they would soon devise some method of providing it. Rather than let the cattle be entirely exposed, a screen of evergreens or of cornstalks might

be constructed in half a day that would be of great advantage.

Screens to break the wind need not be high. It is said that the soldiers in the Crimean war found that a pile of sods a foot or eighteen inches high protected them as well as a wall of six feet, while they lay in their blankets on the lee side of this slight mound. It is the wind, and not steady cold, that is so injurious to animals; and the same is true to a certain extent in regard to plants. It is astonishing how slight a covering will protect a plant. Anything that will break the force of the wind is nearly all that is necessary.

Is there no economical way by which old zigzag fences can be "straightened out"? They occupy a great quantity of land, which is worse than wasted, as weeds and rubbish of all kinds accumulate in the corners of the fence. One-third of the rails might be saved, which could be used for making additional fence; and last, though not least, one would not be in constant apprehension that the cattle might throw down the rails and get into the growing crops.

I am not sure that, with wood at from \$8 to \$12 per cord, it would not be better to use the old rails for fuel and make new board fence. I have some fences on my farm that would make a cord of wood to a rod! Many of the lower rails are a foot in diameter. They are old settlers, but are still sound, and will make good fire-wood.

The *Philadelphia Rural Advertiser* for December says: "The price of best print butter in the Philadelphia market has now reached one dollar per pound." The editor, unlike most city editors, thinks the price is not so unreasonable as many suppose. Ordinary milch cows, he says, have recently been sold to farmers for \$100 each. Feed of all kinds has doubled and trebled, and labor is much higher.

The editor of the *Rural Advertiser*, Paschall Morris, is good authority on such matters, and he says: "Excepting roots, we have found no food to have so great an effect in increasing milk secretions as bran, or the article called ship-stuff, from which some of the coarser parts of the flour have not been separated."

I have just been reading an account of a crop of mangold wurzel raised by William Birnie, of Springfield, Mass. The cost of manures, cultivation, harvesting, &c., was \$205.45 on two and a half acres of land. The crop was 3,166 bushels of 60 pounds to the bushel. Most of us would think \$82 per acre a large sum to expend in manuring, cultivating and harvesting a crop, but in this case it was certainly a profitable investment. The mangolds cost only 6½ cents a bushel when safely stored in the cellar; and the land is left in admirable condition for future crops. Such "high farming" is profitable.



## A CROW AND A CACKLE FROM THE POULTRY-YARD.

WRITTEN FOR THE GENESEE FARMER BY C. N. BEMENT.

THE noble and ancient chanticleer, whose clarion notes have been the world's time-piece ever since Peter denied his Master, and have never failed to sound the approach of every rising sun; the bird that saved old Rome from conflagration by his warning voice in the dead of night; shall these lose their established rank and give place in man's affections to herds of swine and the sturdy bulls of Bashan? What are all their uncouth grunts, frightful bellowings about the farmer's cottage, compared with all the chirping, chattering, cackling and crowing with which the poultry-yard resounds from day to day? If there is not music there is life in it.

The cock to the farmer is a living clock, where exactness, to be sure, is not quite as correct as some of the Connecticut-made wooden ones; but is sufficient nevertheless to point out the divisions of the day and night, of labor or rest.

If one wishes to be acquainted with the nature and inclinations of fowls, one is obliged to have recourse to the poultry-yard; for we know nothing of the habits of wild fowls; but a long bondage has operated such great alterations in the nature of our fowls that it is not easy to come at their original character. For instance: the tame hen makes no nest; the wild fowl surely does. The fecundity of the former is in a measure unbounded—except in the moulting season it lays almost incessantly. Analogy will not allow us to doubt but that in the wild tribe the laying must be considerably confined, and that it takes place only at regular periods.

The attitudes of the cock are those of haughtiness. He carries his head high; his look is bold and quick; his gait grave; all his motions bespeak a noble assurance; he seems to reign over the other inhabitants of the poultry-yard. His activity is indefatigable, and he is never deficient in vigilance. Incessantly taken up with his mates; he warns them out of danger, gets before them, and, if obliged to yield to greater force which robs him of one, he for a long time expresses by loud out-cries his anger and his regrets; feeling for their suffering, he again utters long and sonorous exclamations, when by their cries they announce the pains or fatigues of laying. A softer chuckling is the signal by which he calls them; his usual shrill crow is, at the same time, the expression of his continued vigilance, the cry of victory after an engagement, and the accent of satisfied love. It was formerly thought that the cock and the nightingale were the only day birds that sang or crowed in the night. Other species also warble after sun-set; but all, as well as the nightingale, are quiet when the season of love is over; whereas the tame cock crows every day and

every night throughout its whole existence. However, there is some ground to presume that it is otherwise in the state of nature, and that the crowing of the wild cock is no more, as with other birds, than the momentary accent of his loves.

If the life of the domestic cock be an uninterrupted series of enjoyments, it is also commonly a continual scene of war. Peace does not last long between cocks among which the empire of the poultry-yard has been divided, as they are actuated by a restless, jealous, hasty, fiery disposition; their quarrels are frequent and generally bloody. A fight soon follows the provocation. The two adversaries face each other; their feathers are bristled up; the head low; the bill ready; they set off together; they stand stiff, rush forward and dash against each other, and repeat the same maneuver till the one that is most adroit and is strongest has torn the comb of his enemy, has thrown him down by slapping him with his wings, or has stabbed him with his spurs, and only ends by the retreat of one of the champions. Sometimes both the champions die in the battle. If one of them be conqueror, he immediately celebrates his triumph by repeated crowings and by flapping his wings. The other disappears, abashed at being defeated.

The disposition of cocks for fighting so desperately, especially when they are not used to live together, and meet for the first time, the courage and obstinacy which they evince in this often dreadful contest, have given the idea of exhibiting cock fights in public. It is that sort of tragedy that many seem to prefer. The annals of these fights mention a very singular sympathy between two cocks. They had successfully beaten all the others; but they could never be made to fight together, notwithstanding the stimulus of the most hateful passions.

The cock begins to pay his addresses to the hens from the time he is four months old. His full vigor only lasts three years, though he may live till ten. It is remarked that in cocks of the large species, the procreative qualities are later in coming forward; they probably enjoy it longer. As soon as the cock gets less nimble, he is no more worthy to figure in the seraglio. His successor must be the finest, the most brave, of all the supernumary young cocks in the poultry-yard.

Less spirited than the males, hens are also milder and more timid, though they fight with each other, and for a moment with ten times more fury than the cocks. Their voice is less sonorous; but its different modulations show that they, as well as cocks, have a varied language. After having laid, they utter loud cries; if they call their chickens together, it is by a short, grave clucking; they warn them out of danger by a monotonous and lengthened cry,



which they repeat till the bird of prey is out of sight; in fine, they keep up a continual cackling, which seems to be a coherent conversation between these very chattering females. There are some hens which faintly imitate the crowing of the cock; they are usually the young ones of the year, and they do not always keep on this mimic fancy, as we have ascertained by following several of these cunning hens, which happened to be at different times in our poultry-yard. As to the rest, they had none of those exterior characteristics which could bring them near the cock; they lay like the rest, and it is wrong that they should be generally proscribed as either barren or as ill-omed. The housewives in several parts of France were forward in putting to death every hen that imitates the crowing of the cock, which in their eyes is the effect of a charm; hence a very jocular saying, in which there may be some meaning: *a hen that crows, a parson that dances, a woman that talks Latin, never come to any good.*

#### FARM WORK IN JAPAN.

A CORRESPONDENT of the *New York Tribune* gives an interesting account of the manner in which farm work is done in Japan. We quote a part of the letter:

"A short season before the New Year and the New Year holidays, are the farmers' holidays of the year—the time when he is least crowded with outdoor or in-door work. The crops of the year last to be gathered are the rice and turnip-radish crop, for the months of November and December are usually so clear and dry that this harvest is left to linger along at the farmer's convenience. The farmer has no barns for his crops—the grains are threshed on the field, and lucky is he if he has even store-rooms for the threshed-out grains.

"The weather favors him as to his most important crops of rice, turnip-radishes and sweet potatoes, and he harvests them as he sells them. The straw and refuse is stacked in the fields, waiting any chance purchaser; if he comes not, fire soon reduces them to ashes and manure.

"The leisure the farmer has at this season is much employed in traveling near home, visiting Yedo or other market towns, and making pilgrimages to favorite temples. At this season Kanagawa is full of strangers from the country, who come far to see the strange sight of a foreign settlement.

"But for the farmer whom thrift or necessity stimulates to unceasing labor, there is plenty of work for the quiet months of midwinter also. It is the time to gather and prepare manures for the coming season. There is timber to be got out of the woods, fire-wood and charcoal to be made. So whenever you go on a country path in winter, in

early morning you will meet strings of pack horses laden with wood, lumber, grain, charcoal, rice, fruits, (oranges, pears and persimmons,) nuts, (chestnuts, large and small black walnuts,) monstrous strings of radishes and other sorts of country produce, and with the load are two long empty buckets which are to be filled with such manures as the farmer can find—principally night-soil, which is collected in unsightly, unsavory reservoirs at some convenient place. Many of these farmers come regularly to town, and go as regularly from house to house, each taking what he carries away as his perquisite. He would be an unthrifty farmer who would ride or lead his horse unladen back from market-town to country. One learns to take the windward of these pack carriers in his country walks. These manures thus carried into the country, are placed to ferment in large vats, under cover, by the house or wayside, giving forth the most villainous odors, as a matter of course. Where this process of fermentation is to proceed long enough, other matter is added, such as half decayed vegetable tops, to increase the mass, to which water is added and a stirring given so often as may be necessary. I have seen many a clayey hill-side which has been scooped out into cave-like receptacles for these manures.

"There is work also for the women and children in the latter winter and early spring months, when every fine day—and nearly every day is fine—parties of them are to be met anywhere, in the woods among the brush or along the hill-slopes and water courses gathering fuel of dead wood, decaying branches, fallen twigs, bamboo grass, reeds and leaves, which are stored in large wicker baskets, or disposed in bundles to be carried home. This fuel is the general fire-wood of the farmers and countrymen, with the exception of a little charcoal for the *hebach*i or brazier around which the family gather in-doors as we do around our fire-places and grates. Fuel is mainly needed for cooking. The winters in this part of Japan are not severe, and the farmers' cottages are always built with a careful regard for a sunny exposure and a situation sheltered from the northerly winds. Hence their hamlets are found along the sheltered valleys or under the lee of protecting hills. The natural defenses of the position are further improved by screens of close hedges, so that many of these hamlets, with their well-kept hedges, inclosing the thatched cottages, have, at a little distance, a charming air of comfort which the nearer approach is wont to belie.

"The woods, which are all planted timber, are frequently cut over to furnish fuel for the towns, timber for building, and material for charcoal. None of the native wood, self-grown, is to be seen hereabout; all is planted. We must go back to the



hill ranges, forty to seventy miles distant, for any primeval woods, and even there the planting hand has been for centuries busy. The favorite trees for the planted groves are the Japan cedar (*Cryptomeria japonica*), the pine (*P. densiflora*), and the retinosora (*R. obtusa*). Under their cover spring up a great variety of indigenous trees. These planted groves are supposed to attain no great age, except where they are left to adorn the surroundings of a favorite temple.

"The New Year holidays well over, the spring work fairly begins. This is, first, stirring the earth among the full-grown crops, which is done with a mattock of long narrow blade; and which tool is to the Japanese, hoe, spade and rake combined. Frequently in early spring it is necessary to tend the wheat to set its roots, which have been disturbed either by the upheaving frosts or the winds blowing away the light soil in the dry winter. The crops are all sown in drills; there is no exception—a broadcast sowing I have never seen. The hoeing and weeding is therefore easily performed, and in the first hoeing the earth is always drawn up freshly about the roots, no matter what the crop may be. Simultaneously with this cultivation is the application of manures, which, with very slight exceptions, are applied in a liquid state to the growing crops. The wet rice fields are treated differently, as I shall mention hereafter.

"The farmer is very busy with his work in the months of February, March, and the early part of April, going between his drills with bucket in one hand and wooden dipper in the other. Ashes, which are largely employed, are mixed with other manures, such as night-soil, the drainage of cess-pools, and applied in the same manner. Where other manures are difficult to be obtained, sea-weed is employed, having been thrown up in large heaps to decay till even this can be put into a semi-liquid portable form.

"The warm suns and frequent rains of spring bring on the crops apace, and the first cultivation and manuring is not over before weeding follows. In this light work the whole household assists, wife and children, and most thoroughly is it done.

"Owing to the general use of night-soil and the comparatively small use of animal manures, the weeding is not laborious, and it is a pleasure to see how clean of weeds or strange grasses every cultivated field is kept. The whole cultivated surface is laid off into patches of irregular size and shape, according to the conformation of the ground, and between these patches and dividing them are narrow edges of turf, while threading and interlacing the fields in every direction are turf-bordered paths wide enough for men and horses to freely pass. The

turf in all these borders and edgings is kept closely pared to check the growth and spread of noxious weeds. Were our own farmers as persistent in this work, we should soon have done with Canada thistles; perhaps they will be when America becomes as thickly populated as Japan, labor becomes as cheap, and our agriculture becomes, as it is here, a general system of horticulture!

"The manner in which these fields are laid out give to the landscape one of its chief charms. Here laid out in small and regular squares, there in a semi-circular sweep along the bend of a hill or stream, again in ovals, triangles, or gourd-shaped patches, as the natural inequalities of the surface indicate, rising one above the other or inclining with easy slope toward each other, and everywhere a uniform level surface is offered, the drills are presented to the eye at varying angles to each other so as to break up the uniformity, and thus, with the farmer's plodding work a love of order and a presence of taste is ever manifest, and the ordinary laborer becomes an ornamental landscape gardener."

JOHN JOHNSTON says that he has noticed that those farmers who have most difficulty to make *both ends meet*, always plow most and keep most stock. Now these men take the true plan to keep themselves always poor, because their stock and crops are always poor and bring little. It is a good profit to raise three hundred bushels of wheat from ten acres; but when it takes thirty acres to raise that amount, it is raised at a loss. So it is with cattle and sheep. You will see the thinking farmer making four-year-old steers worth from \$60 to \$80 each, and his neighbor's, at the same age, not worth over \$25 to \$40. If his land is exhausted—and a great many farms are—then he should plow no more than he can thoroughly manure. Seed with clover and grass, and let it rest for even two years, and that field will not only pay well for tillage, but it will furnish manure (if rightly managed) to make another field of the same size rich also. It is bad policy, when a field is once highly manured, to continue cropping it with grain until the manure is used up. The latter end of that land will be worse than the first. But let that land lay in clover, even one year, but two is better, after it is manured, and then it will stand perhaps six good crops before it requires manuring; if clay subsoil it certainly will.

VALUE OF PUMPKINS FOR MILCH COWS.—Two cows that were fed on grass were each fed, in addition, four medium-sized pumpkins daily. The increase in the quantity of milk from the addition of the pumpkins to their feed was about one-third. At the same time, the nutritious quality of the grass was deteriorating by the severe frosts of autumn. The seeds were not removed from the pumpkins.

L. L. F.



### "THE CATTLE MELON."

THE English agricultural papers have much to say in regard to the "Cattle Melon," introduced a year or two since. In the last *Gardeners' Chronicle*, Mr. Blundell, who resides in the south of England, writes as follows:

"Another year's experience in the cultivation of this valuable green crop has given me more confidence in recommending it to the notice of the agricultural community, not only as a crop capable of yielding a large amount of food for cattle, but as coming into use at the time of year when the old store of mangel is usually exhausted, and before the new crop is fit for feeding, and also previous to the period of the different sorts of Swedes and turnips being ripe for use, at the same time being available at the usual period of the greatest scarcity of grass, viz., August, September and October. The present season is an instance in which the Cattle Melon has proved invaluable. In my own case, having a good number of fattening and store cattle of different ages under cover, had it not been for the supply of this fruit, I must have sold the animals at a great sacrifice, or entered into enormous expenses to have kept them in condition entirely upon artificial and dry food; my store of old mangel was finished on the 1st of September, since which time I have cut daily such of the melons and marrows as were not likely to ripen their seed, and cut them with Gardner's cutter, mixing with cake in the same manner as for feeding with mangel, and I certainly never saw cattle do better with so limited a supply of succulent food.

"The stage at which the fruit are best for feeding I think is about the time the seed begins to form—say about two-thirds of the size attained when ripe. In order to ascertain the best varieties for cattle feeding, and for yielding the largest acreable production, I have been induced during the past season to get all the sorts I possibly could of melons and marrows, and the result of the growth of so many kinds has been not only very interesting, but has gone far to satisfy me that the melons and marrows have each a separate value for agricultural purposes; some sorts of marrows have grown like a shrub, and produced from eight to ten fruit, weighing two pounds each and upwards, and this within a space of two feet each way, certainly not more space than is required for a forward turnip plant. Some others of the same habit of growth give fruit of an elongated shape, and grow to considerable size, producing from three to five fruits each, weighing on an average about six pounds, within the space of the before-named space of two feet; other kinds of marrows require much room for the vine, similar to the melons.

"The whole of the marrows, however, are very valuable for feeding purposes, and come quicker to maturity, and are fit for use a month earlier than the melons. I particularly noticed a variety of the marrow producing good sized fruits, say eight to ten pounds each, and having no sign of seed forming, as solid as a Swede or mangel, and as heavy, bulk for bulk, being also very sweet to the taste. I have seen no new feature in the growth of the melons different from my last year's description of them. As, however, they take a good deal of room, I this year planted three rows of mangel between each row of melons, and this plan, without injuring the growth of the mangel, gives room for the bine to spread, so necessary to their successful growth; in another field I planted two rows of potatoes between the melons and marrows. In both fields the seed came up unevenly owing to the dry weather, some making their appearance eight weeks after planting. I am therefore of opinion that they should be planted at the end of the month of April, in order to secure moisture sufficient to insure the vegetation of the seed. It is worthy of notice that the plants which did come passed through the ordeal of the dry summer admirably. While the mangel and potatoes between the rows of melons and marrows were almost destroyed by the grub, this insect however never attacked the melon plants at all; but when the plants had nearly attained their full foliage, the leaves were attacked by the black aphid, which seemed to check them considerably, but after the rains of the 23d of August they recovered greatly, threw out more foliage and produced fruit abundantly, although too late for seeding, yet well adapted for present feeding. On clearing some of my marrows to-day I weighed a portion, forty fruits weighing five hundred and sixty pounds to the pole, being forty tons to the acre, and being exactly the same weight per rod as thirty-seven fruits of the melons of last year's growth."

Mr. Blundell adds, that although the drouth during the past season has diminished the crop, and also made the produce available at a later period, yet it has not suffered at all in proportion to the other root crops. It has, however, delayed the ripening of the fruit, and he will in consequence have much less seed to spare, and is much disappointed in this matter, as he had hoped to supply a large demand, so many last year having been unable to obtain seed, and having expressed a wish to be supplied by his growth of the following season.

We suppose this so-called "Cattle Melon," if not a pumpkin or squash, belongs to the pumpkin family. It has been dignified with the name of "Cattle Melon," and the seeds have sold at a very high price."



## BREEDING SHORT-HORNS.

How is it, a correspondent asks in substance, that the best Short-horn families run the greatest risk of being spoiled by bad crossing; and that many families, once famous, *have* been spoiled irretrievably? It is too plain to need proving that good buyers are not necessarily good judges, and that plenty of money is an indifferent guarantee for plenty of wisdom in the use of it. Short-horn breeding is a fashionable pursuit as well as an important branch of national trade; and not unfrequently men of wealth who can bring no requisite but cash rush into it with infatuated ardor. The sorts most in vogue are secured. Dealt with in ignorance, they speedily degenerate. Their owners, unacquainted with the great principles implied in the cultivation of improved stock; knowing nothing of typical resemblances and differences; and concluding that all sires, if well to look at, are equally well worth employing, soon disturb, by ill-considered alliances, the peculiar characteristics of their purchases, and at length have little left beyond the name of what was once excellent. The reverse of what Sir John Cutler did, as related in the memoirs of Martinus Scriblerus, they do. Sir John had a pair of black worsted stockings, which his maid darned so often with silk that they became at last a pair of silk stockings. It is with *them*, silk stockings that are darned with worsted; crossed and re-crossed with inferior bulls until the power of the blood they started with is but the shadow of a shade. The truth is, and it is notorious, that many persons (*breeders*, perhaps we ought to call them) use bulls with as little knowledge of what they are doing as a man takes one of two roads where there is no finger-post to guide him.—*Bell's Messenger*.

TURNIP CULTURE IN CANADA.—Sanford Howard, of the Michigan Agricultural College, was in Canada West the past autumn, and writes as follows to the *Country Gentleman*:

"The extent to which root-culture is carried on in Canada would surprise some of our farmers. The Swedish turnip (*ruta бага*) is the principal root, and of this I found from ten to twenty acres or more on farms in general. Mr. Stone, as I was informed, had fifty acres. I saw a portion of the crop, which, like that of this section generally, is fine, although the season, until quite late, was very unfavorable. Many farmers say their crop will reach from 800 to 1,000 bushels to the acre."

As the climate of Canada West is quite similar to that of Western New York, we would be glad if some of our Canadian subscribers would give us their method of culture, and especially as to the best way of keeping the turnips during the winter.

## THE STEAM PLOW ON A RUN-DOWN FARM.

THE London *Agricultural Gazette* for Nov. 19 gives an account of the performances of Fowler's steam plow (the kind which has been imported to this country) on a farm which had lain idle till the 16th of June.

The farm belongs to Mr. Dunn, of London, who in an unfortunate hour had granted a lease to an incompetent tenant. After this farm had been occupied for eight or nine years, unable to exact more from the land and landlord than he had already done, the tenant abandoned the farm and the country, and it was not until after suffering "the law's delay" for several months that the landlord could legally take possession, so that the farm lay for nearly six months without man or beast upon it.

In this neglected state the proprietor about the middle of June obtained possession. How was he to begin at this season of the year, without a laborer or a working animal? Mr. Read's steam plow had done all its summer work and was lying idle. The agent secured the services of this implement. On the 16th of June it was therefore set to work on this farm of 800 acres, about one-half of which is in tillage.

The first field it did was one on which Swedes had been roughly planted the year previously, but it had not been touched since the crop was eaten off, and was then a perfect wilderness of couch, dock, thistles and dandelions. The steam plow plowed this three times, and dragged it six or eight times over, and very soon the field was made perfectly clean and planted with turnips. The next field received similar treatment. The third is of especial interest as illustrating the power of the steam plow under the greatest disadvantages. It had been uncultivated for four or five years, having had only one crop planted upon it during that period. Its soil was matted together by a network of couch, and to break up in the middle of the last dry summer this couch-bound sun-hardened soil, seemed like attempting to break up a turnpike road. This field is 35 acres in extent, and the engine was set to work in it July 7, and left it on the 22d, having plowed, cultivated and dragged the most part of it six or eight times to a place.

Under the active and judicious management of Mr. John Attwater, who had singularly propitious weather to help him, after the steam plow with drag attached had begun work, there followed drags, rolls and harrows, with laborers to collect and burn the filth. And no sooner had the steam plow done it once than the same thing was repeated; and by this means, in little over a fortnight, this land, which was in a most wretched state, became perfectly clean, and now there is a good plant of turnips.



growing upon it. The exact quantity of work done and paid for on Coomb End from the 16th of June until the 9th of August was—

	A.	R.	P.
Plowing.....	179	0	14
Cultivating.....	49	2	28
Draggings.....	358	0	28
	586	3	30

The farm is now restored to a comparatively clean state, and a greater triumph of steam cultivation we have never known.

### HOW TO KILL CANADA THISTLES.

HEAVY seeding and early mowing are the only remedies for this pest. To cultivate the ground except by thorough fallowing, is a sure means of encouraging their growth and spreading. And even the most perfect and expensive fallowing is liable to fail of its object if by chance a single stalk is allowed to seed in the neighborhood; because the seeds are scattered by the wind with great facility, and the better the tilth the more readily the seed germinates. By ordinary cultivation the roots are broken and distributed, and the seed is matured usually before the crop is ripe enough to harvest. Under such circumstances the spread is very rapid. And even in pastures they multiply rapidly, especially in loose soils. To rid land of thistles, seed it thickly with grass. A good strong growth of grass, besides reducing the amount of thistles at once, decreases its vitality, and thus retards the maturity until a later period than that at which the grass is ripe enough for haying. If, then, the crop is cut in season, the slender stumps of the thistles are exposed to the damaging effects of the weather, and no fears need be entertained of spreading by either root or seeding. If the cutting is delayed, there is little danger from seeding, as it is rare to find seeds having vitality when grown among grass. Time and patient determination are necessary to final success. How long a time will be required in every case to complete their destruction, I will not undertake to say; but I have never known an instance when enough thistles were found at the second cutting to injure the market value of the hay, or to materially lessen its amount. As a rule, I think the third mowing will prove effectual, except against what may yet spring from seed remaining in the soil.

It is said that a company has been organized in New York, with a capital of \$200,000, to establish a beet-root sugar factory in the West. There can be no doubt that, at the present price of sugar, it can be made from the beet with considerable profit.

At the agricultural competition of Vaucuse, in France, held at Thor, last summer, the prize for plowing was carried off by a young woman twenty years of age.

### WINTERING STOCK.

THE English agricultural papers are still discussing the best means of wintering cattle and sheep in seasons like the past, when, owing to the great drouth, there is a scarcity of fodder, turnips, &c. In the November number of the *Genesee Farmer* we gave some extracts from the remarks made on the subject by eminent farmers in different parts of England. The question how to winter horses, cattle and sheep most economically is one of great interest to American farmers at this time, and though we may not be able to adopt the recommendation of English farmers, we may get some hints that may prove useful.

The London *Agricultural Gazette* of October 29 says:

"The voluminous reports from many counties which we have published during the past few weeks, while they indicate how general the loss of the turnip crop and the failure of the young clover plant has been throughout the southern and midland counties of England, are yet not generally definite and precise enough in the specifications which they offer of the treatment which, in the absence of their usual food, the live stock of the farm is, during the coming winter, to receive. Probably Mr. Stratton's statement that he has found his cattle on straw and four or five pounds of oats apiece a day to do as well as they used to do on hay and turnips, is the most practical contribution that has been made to the discussion, and to this agrees Mr. Curtler's recommendation made at the recent meeting of the Worcester Agricultural Society. Mr. Curtler has no turnips, very few mangels, and very little hay, but he has good crops of straw; so that he may be considered this season, as he no doubt is at all times, a good model farmer. What, then, is his remedy for the difficulties in which he is placed? He finds that he can buy good Irish oats, weighing 39 pounds a bushel, for 20s. per quarter [60 cents per bushel], and of these he has been giving his lambs a quart a day; and, though they have but little to eat from the bare pastures, he finds that they are looking remarkably well. He can keep them for 1d. per day on these oats, and if he chose he could do the same with maize [Indian corn].

"The following is the substance of what he is reported to have said on this subject:

"He could afford to give his cows a peck of maize per day, and by this means he could keep them at the rate of 4s. 6d. per head per week; but if they liked to keep their stock a bit better and get them fatter, they had nothing to do but to cut their bean straw into chaff, put it in a large vessel by the side of the engine and wet it, adding to it so much corn per cow, and then they had a mucilage that



would feed them and get them fat. In this he did not think there was more expense incurred than that which attended the growth of turnips. The same system might be adopted with regard to their cart horses.'

"Mr. Curtler then alluded to the difference of price between oil-cake and maize, and wanted to know whether one pound of oil-cake was worth two pounds of maize or of oats? He thought there was no pretence for keeping up the former at the price for which it was sometimes sold, and farmers ought to determine, having found a substitute, not to buy it, so that in time the price would be brought down to what it ought to be. Oats and maize for sheep and cattle, and for horses, and mixed with barley and wheat if they chose, would be proper food for stock during the winter, and it would be found that this could be supplied at a less price than turnips could be grown."

#### FIRE-PROOF WASH FOR SHINGLES.

MR. JOHN MEARS communicates the following to the *Boston Cultivator*. He states that after an experience of eleven years, and using seven forges in his blacksmith shop, he has never seen a shingle on fire nor has a nail started. The following is his method of preparing them:

"Having a large trough, I put into it a bushel of quick-lime, half a bushel of refuse salt, and five or six pounds of potash, adding water to slack the lime and dissolve the vegetable alkali and the salt—well knowing that pieces of an old lime-pit, a soap barrel or a pork tub were not the best kindling stuff, and having long since learned, while at the Vineyard Sound, that hot salt water whitewash would endure far longer than that made with fresh water, absorbing moisture, striking into the wood and not peeling the washing off. I set the bundle of shingles nearly to the bands in the wash for two hours, then turned them end for end. When laid on the roof and walls they were brushed over at intervals of two or three years after."

USE OF HORSE FLESH.—We learn from the foreign journals that the attempts to popularize the use of horse flesh have been very successful in Vienna. Several butchers' shops have been opened in that city for the sale of this meat, under the authority of Government, and with a regulated superintendence. The permission was first obtained a few years since, but of late the business has considerably increased.—*North British Agriculturist*.

CALIFORNIA beats the world in agricultural products. A bundle of oat straw, six feet high, grown in the Washoe Valley, has been sent to the editor of the *Carson City Post*.

#### MANAGEMENT OF RESTIVE HORSES.

A CORRESPONDENT writes: "I have a valuable mare, of very high spirits. Last fall she began to be restive about starting, so much so that it was dangerous to drive her single. She was impatient to start, and if held in would rear and pitch about, sometimes throwing herself down. Finding the matter becoming serious, I undertook to cure her, and succeeded perfectly. The *modus operandi* is this: Let the driver have the entire charge of her, and take pains, by gentle usage and kindness, to be on good terms with her. When she is to be driven, let him harness her himself, talking to and patting her during the process. When all is ready, go to her head and stand, without holding her, if possible, till everything is in the buggy but yourself. Now, holding the lines, step back a pace or two. She will probably start; if she does, pull her up *without a* jerk, speaking kindly to her as soon as she is still. If she backs up or rears, hold her by the head, but don't strike her. Repeat the process till she is mad enough to stand still, and take that time to get in. Now if you order her to start, she will probably make more trouble; wait, therefore, till she is ready—you can tell by watching her ears—then give her the word and let her go. By pursuing this plan a few weeks a radical cure may be effected; this, at least, is my experience. One very important point is, never on any account use any severity with a horse of that disposition; it can never do any good, and is almost sure to do hurt. It should be remembered that while it is never necessary to give up to a horse, it is very often advisable to humor them."—*Exchange*.

HOW TO MAKE A BARNYARD.—The best way, in my opinion, to form a barnyard for the preservation of manure, without its becoming muddy, where the ground is higher than some of its surrounding parts, is to plow and scrape from the center to the outside, making a gradual descent from the outside to the center. Let the fall be one-half foot in ten, and falling a little more as you near the center. Dig a drain from the center to some suitable place without the yard, where you can construct a vat to put in leaves, sods, muck, &c., that will absorb and retain the liquor from the yard. The bottom and sides may be formed of plank, or may be more substantially built of stone and mortar. The top of the vat should be made so as to guard against rains and surface water as much as possible. The drain should fall considerably, and should be made of plank eight inches high and one foot wide inside. The head of the drain should be covered over with a good strong iron grate. The yard ought to be well paved with cobble stone, and with a little pains you can always have a dry yard. The water from the barn and sheds should never be allowed to run into the yard, but should be carried by good eave-troughs to a large cistern for the purpose of watering stock.—*Working Farmer*.



## REPORT OF THE COMMISSIONER OF AGRICULTURE.

WE have received, in pamphlet form, the Report of the Commissioner of Agriculture for the year 1864. We glean a few facts from it that may be of interest to our readers:

The Wheat crop of 1864 is less than that of 1863 by over 18,000,000 bushels. Its quality, however, is generally superior.

Rye is nearly a million bushels less than in 1863.

Barley is nearly three-quarters of a million bushels less than in 1863.

The crop of Oats is nearly three million bushels greater than in 1863.

The Corn crop is 55,000,000 bushels less than that of 1862, but 78,500,000 bushels greater than that of 1863.

The crop of Buckwheat is equal to that of 1862, and nearly 3,000,000 bushels greater than that of 1863.

The crop of Potatoes is nearly 4,000,000 bushels less than that of 1863.

Hay is over one and a half million tons less than in 1863.

More attention has been paid to the cultivation of Flax. The crop of Cotton in Illinois is 40 per cent. larger than in 1862. Sorghum has increased but little. Root crops have decreased—a fact which the Commissioner regrets, as a good crop of turnips, mangels, &c., would take the place of corn in the winter feeding of stock.

Apples, Peaches and Grapes have been very good in the Eastern and Middle States, but “in the Western States the destruction of the trees by the intense cold has caused a diminution of fruit that will be felt for years.”

“*Horses*—The great demand for horses and mules to supply the army has enhanced their price, and drawn away a great number from the farming operations.

“*Cattle*—The large amount of beef consumed by the army, the scarcity of corn and fodder the last winter, and the drouth of the past summer, will reduce to a considerable extent the number of cattle to be fattened this year. The supply of cattle is evidently becoming inadequate to meet the wants of the army and the people of the country.

“*Sheep*—The increased demand for wool has induced a corresponding increase in sheep raising, one of the most important and profitable branches of farming, and it is to be hoped that before many years have passed we shall not only cease to be importers of wool, but exporters to a large extent.\*

“*Swine*—The number of fattening hogs is much

\* To a wool-grower this is not a pleasing suggestion. Before we can export wool the price here must fall to about 80 cents per pound.—Ed. G. F.

below an average, probably one-third; this is mainly due to the short crop of corn last fall and winter. The hog cholera, though still prevailing in some places, has not been so destructive as usual in the West.”

There is one sentence in the Report which we fail to understand. The subject to which it alludes is of great interest, and we quote the paragraph entire. Perhaps our readers will be able to extract an idea out of it:

“The prices for November, 1864, have not yet been ascertained, and hence the table for that year is incomplete. But it may be taken for granted that when ascertained they will not give as great a proportional value as the prices of November, 1863, adding to them the increased rate in prices occasioned by the advance in gold, and the increased amount of the crops of 1864; for the reason that the prices in Great Britain, which give value so largely to our agricultural products, were much less in 1864 than in 1863, and to the extent of their reduction will be the proportional value of the crop of 1864. The value of the crops named for 1864 will range between \$1,500,000,000 and \$1,750,000,000. But it is evident that the value will be very favorable to the farmer, who, by availing himself of his ability to live on his own resources, can avoid, to a great extent, the increased living expenses that others are subject to, from the greatly increased prices of clothing, rents, fuel and food.”

The meaning of the paragraph may be this: The crops of 1864 are larger than in 1863. Prices, however, owing to lower rates in Great Britain, are not now as high in real money or gold as in 1863. But owing to the depreciation of our legal money, prices are nominally higher; and as farmers can live principally on the products of their own farms, the increased cost of living caused by this depreciation of paper money affects them far less than other classes, and the result, therefore, on the whole, is favorable to farmers. While prices are really lower than in 1863, they are higher in legal money, and though the money received for a given amount of farm produce will not buy as much as the money obtained for the same amount of produce last year, yet as farmers have more to sell, and need buy but little, they are better off than in 1863.

This may be the meaning of the paragraph, but it is somewhat doubtful. One thing, however, is certain: the statement that prices are lower now in Great Britain than they were in 1863 is a mistake. In November, 1863, the London *Mark Lane Express* quoted American white wheat in London at \$1.20@ \$1.24 per bushel; Indian corn, 79@82 cents; Rye, 79 cents. The same paper for Nov. 14, 1864, quotes prices as follows: American white wheat, \$1.29@



\$1.35 per bushel; Indian corn, 81@93 cents; Rye, 92c.@\$1.02 per bushel. Instead of being "much less in 1864 than in 1863," wheat was from 9 to 11 cents per bushel higher, Indian corn from 2 to 11 cents higher, and Rye from 20 to 23 cents per bushel higher in 1864 than in 1863. And these are gold prices. There is, therefore, no reason why wheat and Indian corn in this country should not be higher, in gold, than they were in 1863.

#### FILLING ICE-HOUSES WITH SNOW.

As the time is now approaching when the supply of ice for the ensuing year is to be secured, I beg leave to give you the experience of one of our "Clifton Farmer's Club," of Clifton, O. His ice-house is situated on the side of a gravel hill, covering a pit 10 feet deep and 12 feet square, and is a simple frame structure over the pit about 4 or 5 feet in height; the sides of the pit are boarded up, and the drainage is through the gravel.

Finding it expensive to haul ice from the neighboring ponds and rivers, he last winter filled his house with *snow*, after the custom prevailing in Switzerland and California (for my friend is a traveler), simply rolling it up in masses, and with a wheelbarrow conveying it to the house—first lining the sides of the pit with straw, and after it was filled covering the snow with the same material, thus filling his house without cost, and securing an abundant supply of good ice for his large family during the whole summer. The snow settled down into a compact mass, when the spring and summer heats affected it, and a portion still remains at the bottom of the pit as solid as a glacier of the Alps.—*Verbum Sap, in Country Gentleman.*

**LARGE COTSWOLD SHEEP.**—A correspondent of the *Irish Farmers' Gazette* writes that paper as follows:

"In a report of the New York State Fair, held in Rochester, N. Y., last September, it is stated that one Cotswold ram, bought from F. W. Stone, of Canada West, weighed 414½ pounds, and sheared 18 pounds of wool. Have you any account of a sheep of any breed in this country of that weight? Even the sheep exhibited in Hamburg last year by Mr. Marshall, of Lincoln, did not weigh that. The report of the show is taken from the *Genesee Farmer* for October."

The editor of the *Irish Farmers' Gazette*, in answer to the above, says: "We have no memorandum at hand to refer to on this subject." We transfer the inquiry to our columns in hopes of eliciting information on the subject.

**WARTS ON HORSES.**—In reply to an inquiry how a wart can be removed from a horse, the *Irish Farmers' Gazette* says: "Keep it constantly dressed in Archangel tar."

#### TURNIP FEEDING.

It has been asserted of late years by agriculturists of standing and eminence, that the turnip and other root crops are so far from being profitable to the farmer, that when all expenses of cultivation and attendance upon the cattle are taken into the account, the balance-sheet would show a heavy loss at the end of the season, without reckoning the loss of animals by accident or disease, which is frequently also very heavy; and they argue from this that farming would be more profitable if they could dispense with root crops and cattle grazing altogether, so far as the winter is concerned, the bullock shed being, at best, only a manure manufactory, and the cattle the working machines in it.

This, however, is a very narrow view to take of the question; because, if it is admitted that the direct return for the expense of raising a turnip crop and consuming it by bullocks is usually very small, and probably may sometimes exhibit a balance on the wrong side of the page, those expenses ought in fairness to be spread over the whole course of crops, which receives a double benefit, in the better condition and cleanness of the land, and in the unexhausted manure in the soil after the turnips are removed. If we add to these the conversion of the straw into manure of a far superior quality to what was formerly made by lean cattle, it needs no calculation whatever to prove that the turnip husbandry is the basis of agricultural prosperity; and we see the proofs of it in the condition of the land, as well as of its cultivators, as compared with what it was before the alternate culture and the turnip husbandry were introduced.

It is not always, however, that cattle winter grazing is unprofitable, or attended with a loss; and at the present, which seems likely to be the permanent, price of beef and mutton, we might expect to find the reverse to be the case, and that independent of the collateral advantages there would be a direct profit upon the consumption of the turnip or mangel crops. If we estimate the whole expense of raising them, in round numbers, as averaging £9 per acre (which we believe to be not far from the truth), that quantity of Swedes will fatten a bullock of from 60 stone to 70 stone, that may be purchased at any of the fairs at Michaelmas for £14. When fat, it will fetch 8s. per stone, or from £24 to £28, which certainly will entail no loss on grazing. We have, however, given the extreme cost price of the lean animal, which may frequently be purchased for £12 or £13; but the above estimate is sufficient to show that cattle grazing is not necessarily or invariably a losing game. If corn or cake is employed, the fattening process will be hastened, with a corresponding decrease in the consumption of the turnips, so that it will benefit rather than injure the account.—*Agriculture, Ancient and Modern.*



### TRIAL OF IMPLEMENTS.

At a late meeting of the Executive Committee of the N. Y. State Agricultural Society, H. T. E. Foster, of Seneca county, Vice President of the Society, moved that a Trial of Implements be held the ensuing season, if suitable arrangements can be made for the trial. We trust that the trial will take place, and that plows, cultivators, harrows, and other implements for cleaning and pulverizing the soil, will receive special attention. Mowing, reaping and threshing machines are of less importance. They have nearly attained perfection. It is now easier to harvest our crops than it is to grow them. Let us have a trial of ditching machines, draining tools, &c. If possible, let us have a thorough trial of potato-digging machines. Those who have had many potatoes to gather the past autumn will know how to appreciate any machine that will facilitate the labor of digging. We also want a good machine for sowing turnips on ridges, with an attachment for depositing plaster, superphosphate and other light manures with the seed in the drills. We shall never raise roots to any extent till we have such a drill.

By all means let the trial take place the coming season, and if possible let it be held in Western New York. Manufacturers will be blind to their own interests if they fail to respond to the call of the Society. The high price of labor enables all farmers to appreciate more than ever the advantage of good implements and machines. There never was a better time for holding such a trial. Do not let it fall through.

### HARD TIMES FOR FARMERS IN ENGLAND.

In an address before the Tring Agricultural Association, after prizes had been awarded for farms, one of the judges said: "They had been told not to expect prices for wheat to be much higher; and if so, they had but a poor prospect before them. He agreed that they should strain every nerve to increase their flocks; but still they could not do without wheat; and what were they to do if these prices lasted? There was a time when 70s. [\$2.11 per bushel] was considered only about a paying price; now, the price is 36s. [\$1.08 per bushel] and 38s. [\$1.14 per bushel]; and he would tell the landed proprietors that if that is to be the order of the day, the farmers must turn their attention to something else. It is all very well to say you must have more stock; but the question is, How are we to keep what we have got? I am no alarmist, but I tell you that I dread the coming winter. We have been told that this is a golden year. We grow our crops, turnips, Swedes, mangels and clover, but the fields are nearly all a failure; and with wheat at 36s. to 38s. per quarter, I say we have a gloomy prospect before us."

### AN APOLOGY FOR ASSES.

SINCE the time of Balaam, no ass, we believe, has been known to complain of hard treatment, or to utter a word of remonstrance, either when a company of mischievous lads have sought their amusement in tormenting it, or when its unfeeling master has belabored its hide with a heavy stick, while it was exerting its utmost strength in dragging a heavy load up a steep hill on a hot summer day. Could "the dumb ass" now "speak," it would tell many a tale of woe. But as silence is imposed upon it, may I be permitted to say a few words in its behalf? I would then suggest that when a parcel of boys are found tormenting an ass in sport, they should be subjected to a good whipping; and that when a poor ass finds it difficult to draw the cart up a steep hill, the master, instead of wearing out his stick by a succession of heavy blows upon the poor animal, should himself lend a helping hand, and not require his four-legged servant to perform impossibilities, by putting forth more strength than it possesses.

One reason that is usually assigned for the harshness and contempt with which the ass is treated, is its alleged stupidity, so that a dull scholar is often compared to this unfortunate beast. It is said that when Mr. Charles Wesley was once giving a lesson to his daughter, he said, somewhat hastily, "Sarah, you are as stupid as an ass!" She cast an imploring look upon him, at which his relentings kindled, and he finished the sentence by adding, "and as patient."

I am not, however, satisfied that the ass is really so stupid as many people imagine. I have seen an ass defend itself with an archness and effect which to me have been very amusing, and which I have seldom seen equaled by any other animal. One example I will mention. Some years ago I was going to a place of worship in the neighborhood of London on a fine morning in spring. There had been heavy rain in the night, so that the road was wet and miry. A youth, pretty far advanced in his teens, was riding upon an ass just before me. It betrayed no unwillingness to carry him, though he was well able to walk. He was not satisfied to enjoy his ride at the animal's expense, but sought amusement by pricking its skin and causing it to wince. The ass bore his insolence for a time with great patience; but at length calmly put its chin between its knees, suddenly threw up its hindquarters, and at once laid the youth all his length in the dirt, effectually spoiling his new coat and trousers. The ass cheerfully trotted on, shaking its head, apparently feeling that it had done two good things. It had got rid of its burden, and inflicted condign punishment upon an offender. It is very likely that the youth would



afterward beat the ass for what it had done; but I will be bold to say that he would never treat it in the same manner again, especially on a Sunday morning, so as to run the risk of spoiling his best clothes.

Now here I cannot but think that the stupidity was not in the ass, but in the human biped who sought his amusement in the ass's misery, and by the ass was righteously punished. In other words, he received a lesson of practical wisdom from a donkey.

#### SUMMER FALLOWS FOR WHEAT.

THE editor of the *Country Gentleman*, in an account of a visit to the farm of John Johnston, of Seneca county, N. Y., one of the most successful wheat growers in this State, says:

"Mr. Johnston believes in fallows. He always fallowed for wheat, until on renting his farm some years ago he would allow the tenant to sow after other crops, but he now returns to the old practice as preferable and really more profitable. We went out to a fallow of about 13 acres, broken up because the twitch or couch grass had begun to come in; and the thorough preparation it was undergoing is like nothing we have seen since the similar labors on English farms. It was plowed early in the season, and cross-plowed, and harrowed twice, in July. Now [the first of August] the roller was going over it, and though already in as good order as most fields are sown, Mr. Johnston has planned to *cultivate* it, using this instrument to draw out what twitch roots remain, to plow again, harrow, re-cultivate, and if necessary to harrow again before the seed is drilled in. This will completely rid it of the twitch, which will be raked up and burned, and the crop of wheat that follows ought to be a good one indeed. The truth is, said he, 'our farmers don't *half work their land*;' and this field was already so mellow that while a few lumps lay over the surface hard and dry—close to the very top on most of it, the soil was shown to be as moist as ever, notwithstanding a fortnight's lack of rain."

**SUBSTITUTE FOR SWEET POTATOES.**—Good ripe Hubbard Squash, when baked, make an excellent dish when eaten with butter, or what is better yet, with sweet milk or cream. They are as sweet as sweet potatoes, and a very good substitute in this northern climate. People who have only eaten of the common varieties of winter squash, have no idea of the sweetness and excellence of this variety. They are just as easily raised as the common varieties, and are so much superior that no one will ever consent to raise or use the old kinds. Everybody praises the Hubbard, and everybody is right. L. L. F.

#### OATS CHANGED TO RYE.

DR. KEISSENBORNE, a German naturalist, makes the following remarks on this transmutation:

"With reference to the transmutation of oats into rye, this remarkable phenomenon has not only been verified by new experiments, but we have caused beds to be sown with oats, in order that we may be able to silence disbelievers by producing rye stalks which have sprung from the crown that still shows the withered leaves of the oat plant of the previous year. I repeat that this transformation does take place (about midsummer), the plants being cut twice (or thrice) as green fodder before shooting into the ear; the consequence of which is, that a considerable number of oat plants do not die in the course of the winter, but are changed in the following spring into rye, forming stalks that cannot be known from those of the finest rye. The Society (agricultural) at Coburg takes credit to itself for perseverance in having struggled against the opinion of the public for several years, in order to establish a fact which no physiologist would believe, because people are always apt to confound the laws of nature with those of their own system."

**SALTING STOCK.**—A correspondent of the *German-town Telegraph* says:

"I have used salt for stock a good many years, and have pretty much made up my mind *not to give my cattle any more*. I have been feeding a little less and less for the past four or five years, and it seems to be a waste of money, inasmuch as my stock is quite as fat and sleek as when I fed salt.

"I have also been told that salt fed to milch cows would cause butter to churn easier and quicker, but I cannot see the benefit in this case either.

"I spoiled a stack of clover by salting it. I tried putting it up without salt, and it was much better.

"Such is my experience for a good many years; and although cattle are very fond of the article, I am sure they will do quite as well without. Salt is worth four dollars per barrel here, and is advancing. Give your stock good food, and a variety, and they don't need salt."

**VITALITY OF TURNIP SEED.**—The *London Agricultural Gazette* says: "After extensive experiments we can declare, as their result, that turnip seed of one year old will only germinate about fifty per cent.; two years old, thirty per cent.; three years old, fifteen per cent.; four years old, five per cent."

J. J. MECHE says: "When will farmers learn the value of bean straw, chaffed and moistened by hot water, as a feeding stuff? My old friends of the London Farmers' Club will no longer laugh at me for suggesting the use of straw in feeding, for straw chaff is now becoming the order of the day."



### "ENGLAND'S GLORY."

SUCH is the name of a celebrated English cart stallion. These heavy horses are not adapted to our American system of farming, but our readers will be pleased to see a portrait of one of the best horses of this class.

The weight of "England's Glory" is declared to be 2,464 pounds. He is, nevertheless, said to be "lively and active, of immense power and substance, short on the leg, and very true in his symmetry." His owner "challenges all the world with him."

"England's Glory is a rich brown-bay horse, handsomely mottled, standing seventeen and a half hands high. He has a kind head, with a good bright eye, a fine neck and a good crest.

Such heavy horses are not as fashionable in England as they were thirty years ago. A lighter horse is found more profitable for modern agricultural purposes. What would be considered a light horse in England, would be a very heavy one in this country, and we think it desirable to increase the size and weight of our farm horses. We do not want long, heavy legs, and a lazy gait, but a strong, compact animal, with good shoulders and plenty of muscle in the right places. Our Morgan horses, if about half as heavy again, would make the best farm horses in the world.

### LETTER FROM DR. DANIEL LEE.

FRIEND HARRIS: I thank you for sending me the *Genesee Farmer* for November. Like a tried friend, it awakens pleasant remembrances, and is received with a hearty welcome.

In looking over its pages to take note of any progress in rural affairs, I see that Mr. Thomas has discovered a fungus growing on peach leaves affected by the "curled leaf," in a way that leads him to regard the parasite as the cause of the disease. Mr. Barry "thinks with Mr. Thomas that it is a fungus, but is produced by cold." Some of your readers will be curious to learn how *cold* can cause the growth of fungals on peach leaves and agricultural plants generally; and as neither Mr. Barry, nor any other pomologist at the meeting, explained the matter, I will send you some facts bearing on the subject.

Cold never acts directly on fungus cells to increase their development; while warmth is essential to the growth of all that injure the farmer and fruit-grower. The internal heat of a fermenting or decaying manure heap will show a crop of mold or toad-stools, in cool weather, when neither would grow without the aid of bottom heat. How, then, it may be asked, will *cold* ever produce fungals? Cold often increases the moisture on the leaves and stems of plants without reducing their temperature below the point at

which mildew, rust, mold, and a host of other parasites, refuse to grow. Some cellular developments require much more moisture than others. All cotton is a cellular tissue; but the fine long staple of sea-island cotton can not grow except in a very humid atmosphere; while common upland cotton will grow in a comparatively dry atmosphere. Hanging grass, so abundant in cypress swamps, will not grow in dry localities. Damp linen, if not too cold, soon mildews; and damp leather shoes often mold, and many articles in a cellar that escape in a dry room. Let us examine Mr. Barry's facts by the light of science.

From it we learn that a cubic yard of common air will hold as a gas, or invisible vapor, a half cubic inch of water at 50°. Raise the temperature to 75° and it will hold a cubic inch of water in the same way. Increase the temperature to 100°, and a cubic yard of atmospheric air will contain two cubic inches of water without showing any sensible moisture; and of course four times as much as the like volume at 50°. "By opening a sash at an improper time," cold air came into Mr. Barry's peach-house whose atmosphere may have been at 90° with a high dew point, and thereby caused a mist, or particles of water, to bathe his peach leaves. Without this moisture to sustain a free and rapid circulation through the walls of even microscopic cells, their development would be impossible. Imbibing food ready organized from the plants on which the parasite grows, there is nothing more wonderful in all vital manifestations than the rapidity with which parasitic plants multiply where temperature and moisture favor their growth. In the warm humid atmosphere of Florida, wheat rusts so badly that very little is sown. In extensive districts, mildew and rot prevent the culture of grapes; and even maize is far more subject to fungus attacks in the tropical summers of the South than in the dry atmosphere of the North. Heavy rains are common in most tropical regions, because, to reduce suddenly the temperature of air from 100° to 75°, (assuming it to be saturated at 100°,) will precipitate twice as much water in rain as the air can contain at 50°.

CORN MEAL.—Indian corn meal is about one-half cheaper than flour. Therefore, in times when provisions are high, economy dictates the free use of meal puddings, cakes and bread. In many ways it can be cooked and rendered more palatable and healthy, as one of the articles of diet, than a constant use of fine flour.

L. L. F.

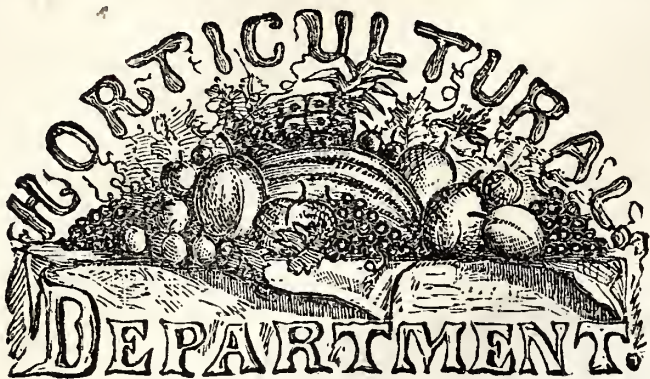
SCOURS IN HORSES.—Put one pint of good gin and one ounce of indigo into a bottle, and shake them well together, and administer in one dose.





"ENGLAND'S GLORY."





### HOW EVERY MAN MAY RAISE HIS OWN PEACHES.

It seems to be pretty generally acknowledged that owing to changes in the climate, caused probably by the removal of forests, &c., we can no longer raise peaches with that ease and certainty which was formerly the case. In favorable seasons we get as large crops and as fine peaches as at any former period, but unfortunately the favorable seasons are not as frequent as the unfavorable ones; and the result is that we are more than half the time without a full supply of peaches. A correspondent of the *Country Gentleman* residing at Syracuse, N. Y., gives his method of protecting peach trees from the severe frosts and insuring a crop every season:

"To raise my own peaches I proceed as follows: I commence by digging the earth away from one side of the tree, at the distance of about twelve or fifteen inches, deep enough to sever all the roots that interfere with my object. Running the spade also under the tree, so as to cut all the roots that descend vertically, the tree is in a condition to be bent over on one side and laid flat on the ground. Several of the stronger lateral roots on that side are not cut at all, but only curved upward somewhat as the tree reaches the ground. This does not injure them. The branches of the tree being brought as close to the earth as possible, they are still farther flattened down by laying an old post or some similar weight upon them, care being used not to break the limbs. The object is to get the top of the tree pretty close to the surface. A mound of earth is then raised over the upturned roots, so as to prevent their freezing in the open air, and the fruit-bearing wood is covered lightly with some kind of litter, enough to conceal them mostly, but not so heavily as to furnish a harbor for mice. I use my old tomato or cucumber vines, potato tops, asparagus stalks, or any thing of that kind. My trees are now ready to be covered with snow as soon as winter sets in, which I keep piled over the whole top of the tree from six inches to a foot in depth. This is all that is required. The whole process may be described under the title of *burying your trees in the snow*. Keep the snow on all winter until it goes off in the spring, and your fruit buds will come out as fresh and lively as they were when laid down at first.

"In the fore part of April, or after the buds begin to show signs of starting, set your trees up again by clearing out the space on which they stand so that the shortened roots will go back naturally to their proper positions, and can be secured there by pressing the

earth in around them, or throwing up an extra quantity around the base of the trunk. Trees thus treated will exhibit no signs of injury, but will grow as vigorously during the summer as though their roots had not been disturbed. I think, however, the operation is a somewhat dwarfing one, but the health of the tree is not in the least affected.

"To grow peaches in this way, I shall depend mostly upon young and small trees. When they get to be old and stiff, it may be better to throw them out altogether and replant. As far as is practicable, the tree should be forced into a fan-shaped form. This brings the branches closer to the ground for covering. My old trees now are ten feet high, and measure ten or twelve through the branches at the widest. Instead of having a spindling growth from the ends of the limbs, they grow quite bushy, and have new wood within three or four feet of the surface. Trees set in the spring of 1863, have many hundreds of blossom buds on them, and may bear a peck of fruit. Trees set last spring have many blossom buds, and will produce as much fruit as it will be safe to allow the trees to bear. I think it pays to get a dozen fine peaches from a single tree two years old from the bud.

"I have tested this method two years in succession successfully, with complete success this last season. The trees experimented upon were five in number, all of the fine sorts, and have been growing in my garden ten or twelve years. They were annually headed down with the hope that some mild winter would transpire which would reward me with a crop of fruit for my pains; but they never produced a single peach, though setting largely with fruit-buds in the fall. I tried several other experiments, which all failed, until in the fall of 1862 I bethought myself of this plan. My five trees were laid down, and one of them only littered as above prescribed, the rest merely covered with snow, after snow fell, which was not until after the first of February, and there never lay over four inches in depth on the ground. That was in 1863. The mercury only fell to about zero until after the snow came in February, when it once or twice went down to 8° or 10° below, and all the peach buds on standing trees were killed. The tree which had the straw protection besides the snow, produced a fine crop; one of the others had two peaches on it; the other three failed. Whether this was owing to the want of straw or the lack of snow previous to the month of February, I could not determine; but last fall I treated all my trees to a litter. The snow in this section was light last winter, but it came earlier and was at one time eight inches in depth, and I was able to keep my trees covered all winter. Their extreme height was six or seven feet. The fruit-buds were preserved beautifully, although the mercury went down to 8° or 10° below zero, and the buds on all the standing trees in my neighborhood perished. My best tree bore two hundred and fifty perfect peaches; another one hundred and fifty; the others not so many, but still handsome crops. They all ripened finely on the trees, and I enjoyed what nobody else did under similar circumstances—quite a supply of the most delicious fruit in the world, grown upon my own grounds.



My trees are now eight or ten feet high, quite spreading, and healthy and vigorous and full of bearing wood. The blossom buds on them may be counted by thousands, and as they are to be subjected to the same process as before, I have no doubt they will produce me several bushels of fruit next year, let the severity of the weather be what it may during the coming winter.

"As soon as I found out what could be done in this way, I increased my stock of trees, having set new ones in both 1863 and 1864. They now show numerous fruit buds, and I shall bury them all in the way I have described, although some of them are mere shrubs. I shall be satisfied with a dozen peaches on these, although the largest will probably bear from four to six dozen.

"Some of your readers may think the amount of labor requisite for this object a serious matter, but I do not. Two men will lay one of my largest trees down in ten or fifteen minutes, and replace it in the spring in the same time. They will have to be watched during the winter to keep the snow on, and in this region of light and fugitive snows, they should be attended to at every fresh fall until a foot in depth is accumulated upon them. In my case, whenever we got an inch or two of new snow I went out with a broom and swept it up for a considerable space around my trees, and threw it up on the pile over them. In more snowy regions, after the work was once done, this close supervision would not be requisite.

"In the natural peach-producing sections, recourse to this method would not be necessary; but where the blossom buds are liable to be killed by the extreme cold of winter, and where the snow can be depended on, every man who tills a farm or cultivates a garden can always produce a peach crop at least for family use, and I see no great obstacle to its being done in a small way for the market. The cultivation of one hundred trees would not involve a very large expense, and if confined to the varieties which bring the highest price, as the Morris Whites for example, which sold in this city last fall for seven dollars per basket, it might be made quite remunerative.

"The simple substance of this plan is to plunge the peach beneath the snow during that portion of the season in which the mercury is liable to fall below six degrees below zero. In any part of the country where this extreme degree of cold occurs, and yet where snow is found, if the tree itself can be carried over the winter, so can the fruit-buds. I think the peach can be grown any where in the Northern States where these conditions may be found.

"The time for laying trees down is in the month of November or December, before the ground freezes solid. Pile on the first snow that comes, and keep them covered as long as the snow lasts."

**WISCONSIN HARDY LIST OF APPLE TREES.**—The writer, residing in Dodge county, in a naturally well-drained, sheltered situation, found the following varieties of apples very little injured by the intense cold of 1863-4, when the thermometer sunk to 30° below zero: Red Astrachan, Keswick Codlin, Early Joe, Early Harvest, Duchess of Oldenburg, Fameuse, Rambo, Raule's Janete, Talman Sweet, Vandevere, Seek-no-Further, Tewksbury, Winter Blush, Winesap. L. L. F.

## THE GREELEY PRIZE GRAPE.

We alluded in a recent number of the *Genesee Farmer* to the fact that Horace Greeley had offered a prize of one hundred dollars for the grape "best adapted to universal cultivation throughout the Middle and Northern States," and that the prize had been awarded to Dr. C. W. Grant for his new seedling grape—the Iona. In view of the fact that few people have not even so much as heard of this grape until the present year, we could not understand how it could be known to be the best grape for "universal" cultivation in the Northern and Middle States.

It seems that others were equally puzzled. The editor of the *Gardeners' Monthly* has some remarks on the matter, from which we make a few extracts:

"It is the duty of such a magazine as ours, to guard its readers against being led away by the pardonable enthusiasm which raisers of new fruits throw around their seedling pets. To their eyes they are glorious visions of beauty; but to the more philosophical and matter-of-fact public, they often prove mere fog banks in which to lose their tempers and their cash.

"Let us look around at the numerous new seedling fruits that have been introduced during the past quarter of a century, and ask how many have stood the test of time? In many cases the oldest are still the best; and the new ideas, which, in the estimation of many well qualified to judge, were to displace everything that dared compete with them, have themselves sunk into utter oblivion.

"The greatest danger to the public comes from all opinions advanced on the merit of a variety, being founded on the fruit alone. A bunch of grapes perhaps is sent to the editor of some popular magazine. He pronounces it the best of some seventy kinds he has tasted that season, and takes the bunch to a meeting of distinguished fruit-growers, all of whom agree with him as to the superior excellence of the fruit tasted. But nothing more is ever heard of the grape's superiority afterward. In the case referred to, we have never tasted a Cuyahoga berry that was anything near the excellence of the ones originally sent us.

"Almost everything else, now retired, which were once popular, have started in the same way. The Clara grape is a familiar illustration; when presented before the Pennsylvania Horticultural Society, its fruit committee, then composed of some of the leading pomological characters of the Union, bestowed a very heavy and unusual premium to mark their sense of its extreme value. But who values the Clara grape now?

"It should not be forgotten that raisers of seedling fruits when once the fancied excellence of their bantlings has become a conviction in their minds, take extra pains with them, and that these advantages result naturally in producing some really fine specimens. These are sent to the press and public exhibitions—wrote about, talked about, and introduced in every way conceivable, until, as the facetious Dr. Ezra Michener would say, the whole community gets a fungus on the brain, which ultimately turns to marked disgust.

"The newest exemplification of this state of affairs



is in the Iona and Israella grapes. The way in which they are brought before the public has a very taking air; and while we have no doubt the parties who are 'engineering the thing through' mean well enough, it is well for our readers to profit by the teachings of the past. The fruits of both were on exhibition at Rochester, and were evidently very good grapes. The dark one, Israella, was not very superior in flavor, but was recommended for its earliness. We should place it in the same class as to general merits with Logan, to which it may perhaps prove superior in some respects. The Iona was of a dark Catawba color, berries not so large as a perfect Catawba, and the flavor of the Catawba class, but not equal to a Catawba well ripened. 'But it ripens so early and grows so well, is so healthy and free from mildews; and, what of all these can the Catawba do?' This is all very well. The Catawba was not once so lowly estimated as now. When these newer arrivals get abroad and find their level of cultivation, will they meet a better fate? What is there in them that societies and newspapers and leading men should go out of their way, and laud these things so particularly and above all?

"At the National Meeting at Rochester, there was a committee appointed to examine all the fruits on exhibition. Some how or another, another committee got appointed subsequently to examine the seedling fruits. They bestowed especial attention on the grapes in their report. This seedling was said to be this, and said to be that. Another was also referred to in this way so strain. So it went on, culminating in a notice of Iona and Israella, when the *ipse dixit* was dropped, and the grapes be-praised in the most positive terms. Some innocent member, supposing that probably these grapes might have some faults, called upon Dr. Grant to come forward and tell the meeting all he knew about them. He knew no fault—rather he knew them to possess some very remarkable properties. 'Is it a good keeper?' inquired one particularly anxious for information. 'It will keep as long as you like!' was the doctor's opinion of this very accommodating variety.

"To the credit of the society there was some inquiry by the committee how it got to be appointed over the one called to examine all the reports. We did not hear the explanation, but when application was made by the committee for permission to re-write their notes, said application was refused.

"We suppose the action of the society was not considered sufficiently endorsing of these seedlings, so a master piece was attempted at the New York American Institute Exhibition. A few days before the time appointed for meeting, Mr. Horace Greeley was induced to offer one hundred dollars for the best American seedling grapes. There was no time to let those who might compete against the Iona know of the offer. No monthly—probably no one weekly agricultural paper—could get the offer before its readers in time. Indeed, in the very *Weekly Tribune* in which we read the offer, there were strong indications that it was hoped and expected the Iona was to be the prize grape—a sort of prophetic anticipation of what appeared in a subsequent issue, that now that the premium had been

awarded the Iona, now Dr. Grant would have to supply an immense stock for the enormous demand he was now sure to have for it. This is so far in the history as the time of writing this will allow. Before the press closes over the manuscript, we have no doubt we might find in the *Tribune*, or somewhere else, a repetition of the great Delaware-house-blowing-down-destruction-plan of advertising, and the pleasing announcement made gratis that an 'immense stock is fortunately on hand.'

"Be this as it may, our friend Greeley may have the consolation of feeling that his one hundred dollars has gone to a grape which, as shown by some fine specimens at Easton, a well-ripened Catawba would beat on the simple quality of flavor alone, and the proprietors of the grape have the right to profit all they can by their business enterprise.

"Our duty to the public is to guard them against placing too much value on these reports of societies or newspapers, or heavy premiums awarded. They are often gained by pressure, or are the result of nicely laid plans; and besides, there are many qualities of high value which an editor or premium committee can not reach. Some grapes have constitutions peculiarly affected by circumstances in their growth; and this will give a very variable character to the fruit. A healthy, and vigorous vine is of this much value: its fruit will be of a uniform character all through. Bearing these things in mind, our readers will know how far to appreciate approving notices, and be able to act understandingly when proposing to add novelties to their lists."

It would seem that Dr. Grant is himself ashamed of the action of the committee, for we learn that he has refused to accept the prize in order, as he justly observes, "to give full opportunity to all who may desire to present their grapes for examination next year." This is well. The matter, therefore, is still open, and the prize is yet to be awarded.

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RAISING PLANTS FROM CUTTINGS.—Peter Henderson, of Jersey City, a noted propagator, gives a simple mode of raising plants from cuttings, such as roses, verbenas, carnations, &c., adapted to inexperienced cultivators, although not the mode used on an extended scale. A common flower-pot saucer, or even a common kitchen saucer or other dish, is filled with sand, and the cuttings thickly inserted in it. It is then watered until it becomes about as liquid as mud. The cuttings should of course be of green or unripened wood, three or four inches long, placed in a strong light in a room or green-house, kept in a temperature of 50° or 80°, but best at 70° to 75°, allowed to remain from ten to twenty days, till rooted, and the sand kept constantly in this semi-fluid state, for if they become partly dry they are ruined.

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TO KEEP BUGS FROM VINES.—Take the feathers from a hen's wing, dip them in spirits of turpentine, and stick one or two in a hill. After every shower it will be necessary to dip them again.



### THE ANT A DESTROYER OF PLANT-LICE.

EDS. GENESEE FARMER: A Michigan correspondent, "S. B. P.," inquires in the August (1864) number of the *Genesee Farmer* "what has become of the lice" which infected his trees. "S. B. P." asks the opinion of others, whether their non-appearance last year was owing to his treatment of the trees, or to some other cause. I have waited, hoping some one else would answer; and now write more for the purpose of calling the attention of your correspondent and readers to what I have determined by observation to be a parasite of the leaf-louse.

My opinion is, that the non-appearance of the lice on his trees last year is not traceable to the treatment the trees received, any further than good culture will always go toward giving trees health and vigor, and consequent power to resist injury. I have heretofore washed my trees with soap—though not whale-oil soap—and not perceived that it made any difference with the lice.

We had the same January cold here, which he speaks of, and yet had the lice. The marl about the roots of his trees was undoubtedly good treatment, but could not have this effect, as I suppose the eggs of these lice are deposited by a fly. These aphides, or lice, do not attract all trees alike. They are found most common on young and thrifty trees, though some trees seldom if ever have them, while others are nearly always infected.

Wherever you find the aphids, you will be likely to find also the ant making himself very busy. If you will watch the ant carefully, and not frighten him away, you will find what he is about; and ever afterward regard him as your friend and acknowledge the wisdom of God in furnishing the means to counteract a pest; and also see how short-sighted our horticultural writers have been when they have laid down rules and recommended traps for destroying ants. If you find that the tender twigs of a certain tree are always infested with the aphids, you will find also that Mr. Ant will build his house there. Let him alone—do not tear his house to pieces—it does not take up but little room, and he is at work for you.

I have no doubt there are others who have found that the ant is a destroyer of these leaf-lice, yet what I here state I give as the result of my own observation, and if any one will show wherein I am wrong, I will thank him so to do.

I do most earnestly put in my plea to spare the ants in our orchards and nurseries. I hold that their destruction is of the same bad policy that would destroy the birds.

E. D. WRIGHT.

Pierpont, Ohio, December, 1864.

REMARKS.—Ants are always found where aphides are abundant. These plant-lice secrete, from two horns, one on each side of the hind parts of their bodies, a sweet fluid called honey-dew. As is well known, ants are fond of sweets, and they suck this fluid from the aphides. We believe, however, they seldom destroy them. They "milk" the aphides, and hence the latter are sometimes called ants' cows. The ants guard the

aphides from insect enemies, and it is said that where the ants do not protect them they seldom thrive. Dr. Fitch gives an amusing account of an insect which he calls Honey-dew Fly. It is of a blackish-green color, and is found most abundantly in July on trees infested with aphides. Dr. Fitch says:

"Watching its opportunity, when the ants have all left a herd of their cattle, the plant-lice, unguarded, it runs in upon them, where they are crowded together, as closely as they can stow themselves, and using its four hind legs for walking and turning round, with its two fore feet it gently scratches upon the backs of the lice, its feet at this time moving with incredible rapidity, corresponding exactly with those of a dog when eagerly occupied in digging open the hole of a woodchuck; at the same time the lips at the end of its beak are held down between its fore feet, instantly sucking dry every particle of honey-dew which the lice, having their backs thus briskly irritated, incontinently spirt out. Thus in a moment the fly runs about over the backs of the whole flock, milking every one of them "dry," as a dairyman would express it, and filling himself with the delicious sweet. But rapid as the fly is in doing this work, he finishes it none too soon for his own safety, for any ant that is near by, from a cry or some other signal given by the lice, seems immediately to know that a thief has broken in among the flock, and with his utmost speed hastens to the spot. As soon as the ant approaches, the fly takes to his heels, as if aware he might come off minus a leg or a wing, if he allowed the enraged ant to grapple him. And the ant now with his antennae gently strokes the backs of the aphides, as if soothing them after such rude treatment, and assuring them of his future watchfulness and protection."

The black cherry tree ant is much smaller than the ant which is usually found on apple trees affected with aphides. They are, however, provided with stings, and can master the larger ants which are destitute of them. Dr. Fitch says that if two or three of these small cherry ants are placed in a vial and then an apple leaf covered with lice, with one of the large ants attending them, is introduced into the bottle, the small ants will approach the aphides, when the large ant, indignant at the intrusion, will seize it by the thorax with its powerful jaws, but is instantly informed of the fact that it carries a sting in its tail and knows how to use it. He is as prompt to drop his intended victim as he had been to seize it, and returns to guarding his flock of aphides, till another of the small ants approaches, which is similarly seized, but with the same result as before. After two or three such encounters he seems to suspect that some mischance has thrown him out of his proper latitude, and he walks around to take a survey of the parts adjacent. He no sooner leaves the flock of lice than one of the small ants hastens to them and rapidly passes its sting around among them, hereby marking them as his own property. From that moment the large ant ceases to notice them, and the small ones gather around and commence rubbing and nursing them as attentively as though they were old acquaintances.



## REMARKABLE PORTUGAL LAUREL TREE.

I AM requested by Lord Vernon to furnish, for the information of the Arboricultural Committee of the Royal Horticultural Society, some account of what was once a somewhat remarkable Portugal Laurel tree growing in the grounds of Sudbury Hall, unfortunately killed to the ground by the severe winter of 1860-1. What made this tree remarkable among its fellows, was that it had from one plant originally become a large group of trees by self-propagation. The points of the lower branches, by resting on the ground, had in time taken root, from which strong erect shoots had proceeded, and ultimately became independent plants; these, in their turn, as they became larger, laid their outer branches down and formed a second circle of trees, and so on in successive layers, until this group of Portugal Laurel was about 35 yards in diameter, having the appearance, at a short distance, of an immense bush, which in all probability would have gone on extending itself had not its career been cut short by the frost. Its height was not particularly remarkable, perhaps never much exceeding 20 feet, but the dense mass of shining green foliage made it an object of interest to all who saw it. Nor was it less interesting to walk through it on a fine summer day, with the sun's rays broken by the mass of foliage overhead, and examine the connecting links between the different trees as they still lay on the surface of the ground, after the manner of strawberry runners, many of which not thicker than a rake or hoe handle, while there stood at each end of them upright trees, of sizes from the thickness of a man's leg to that of a diameter of nine or ten inches. Thus, it appears, that as soon as any branch took root near its point, it ceased to increase in size between the parent and young plant. The circumference of the whole group at the point of the branches was about 110 yards. I have no means of ascertaining the age of the original tree, which doubtless was considerable, as it had been in a state of decay some years previous to 1860; the stump of it, however, is still to be seen, the diameter of which is three feet six inches near the ground. On the breaking up of the frost of that disastrous winter mentioned above, it was hoped that this group would have escaped with little injury, and it was permitted to remain for a season to give it every chance of breaking again. This, however, it refused to do except at the surface of the ground, and it was therefore cut down to the living parts, but the feeble efforts at growth it has made since afford little hope of its ever again becoming an object of interest. It may be worthy of mention here, that this tree used to flower profusely, and produce immense quantities of fruit, which had a very rich appearance when ripe, and in time afforded a glorious feast for the wild birds. The fruit, however, perhaps owing to its extremely bitter taste, did not appear to tempt blackbirds or thrushes much until it was perfectly ripe, and other fruits getting somewhat scarce; they would then commence an attack upon it, and make short work of the immense quantities with which these trees used to be loaded in fine seasons—every berry disappearing in the course of a few days—and no wonder, when the num-

ber of birds is considered, which must have been seen to be believed. They seemed during those few days to have congregated here from every point of the compass. Situation rather sheltered; soil a stiffish loam, drained, but not very dry; subsoil gravelly clay.—*Andrew Dick, in the Proceedings of the Royal Horticultural Society.*

## IONA ISLAND.

Just above Peekskill, where the Hudson river enters the Highlands, is a beautiful little island of perhaps 150 or 200 acres in extent, called Iona. A few years since it was a wilderness waste, occupied by one or two fishermen's huts. Some twelve years since it fell into the hands of Dr. C. W. Grant of Newburg, who christened it Iona. Dr. Grant was an intimate friend of the lamented Downing, and intercourse with him had strongly imbued his mind with horticultural tastes, although he was a dentist by profession. He immediately commenced to improve this island, and in a few short years has made it a perfect horticultural paradise; and his annual receipts from its fruit product reach thousands of dollars. It contains one of the finest Catawba vineyards in the country; also a pear orchard of thousands of trees. Dr. G. has a beautiful orchard of nectarines, peaches and plums, and grows all the finer fruits indigenous to this climate. Surrounded by wild and romantic scenery, bold and lofty mountains—its shores washed by a deep and rapid river, this beautiful island is an object of interest to all who pass up and down the Hudson. The horticultural achievements of Dr. G. have been highly successful in a pecuniary point of view, and serve to demonstrate what a little well directed energy and enterprise can do in this direction.

LOUSY APPLE TREES.—Some young trees from a nursery, set out in the spring of 1863, proved very lousy. They were thoroughly washed when the foliage was upon them with strong soap-suds. Two applications checked but did not entirely destroy the lice, owing to the impossibility of touching all parts. Early last spring, before the buds started, I took home-made soft-soap and thinned it about one-half with water, and washed the trees thoroughly, touching every part. It was done by using a whitewash-brush, and took about ten hours to wash two hundred trees. This season not a louse made its appearance.

L. L. F.

ORCHIDS IN VINERIES.—The London *Gardeners' Chronicle* says that "there are but few orchids worth growing that might not be cultivated under vines, and that, too, in cool houses which in winter are not allowed to go below 40°, and when in summer the temperature is allowed to go as high as the sun will raise it. This can be done without injuring the grape either in color or flavor.



## A MAMMOTH PEAR TREE.

MR. B. SWEET has been to see the mammoth pear tree near Vincennes, Ind., and writes an account of it in the *Prairie Farmer*:

"The tree is about eighty years old, having been set by Mrs. Oxletree after using it as a riding switch in a ride from Vincennes. She stuck it in the ground in the corner of the lot, and from it has grown this enormous tree. As I measured, I found it to be 11 feet 10 inches in circumference 14 inches above the ground. Trunk only 5 feet. Height about 65 feet. Area of top 94 feet in circumference. The tree bears a heavy crop every other year—the intervening year about half a crop.

It stands in an open field on a north elevation. the soil is a light clay mixed with sand. Mrs. Wiley told me that over one hundred and thirty bushels of fruit had been measured from it in a single season. The tree came into bearing the fifteenth year, but with me the grafts have fruited in five years. Like the Dix pear it is almost thornless. It is remarkable that no blight of any kind touches it—neither does it sprout from the root.

"The roots are exposed above the surface of the ground like the beech. It has been on the decline about ten years, and seemingly can not last more than ten more; but with care might have lived 25 years longer. I would sooner part with the Bartlett than with this variety. The fruit is of the medium quality. It is undoubtedly a French variety."

PROTECTING FRUIT TREES FROM MICE.—S. Edwards Todd remarks in the *Boston Cultivator*: "In localities where there are many mice, the most convenient and expeditious manner of protecting fruit trees from injury is to raise a little mound of earth around each of the trees, a foot or more high; and if sods are used they must be well pressed around the trees, so that no holes will be left between them where the mice may enter and gnaw off the bark. Pieces of tin or of sheet iron may be bent around such trees as are in a lawn, where it would be objectionable to dig up the earth about them. Another very effectual way would be to wrap pieces of poor and cheap cloth around them, near the ground, and smear them with coal tar. Coal tar, if applied directly to the bark of young trees, would, probably, injure or kill them."

THE London *Gardeners' Chronicle* offered a prize of £5 for the best English seedling rose last spring. The Floral Committee, in whose hands the prize was placed, has come to the determination, in which we have no doubt they are well advised, that a prize of this kind ought not to be given to any variety which was not of first-class character, lest undue prominence should be given to something of inferior quality. The Committee has also decided that none of the seedlings which have been submitted to it during the year have been shown in a condition which will warrant it in pronouncing them first-rate.

## BLIGHT IN TREES.

DURING the past season a similar malady to the blight [in the pear] appears to have attacked evergreens. We observed it first in the Balsam Fir, where shoots only three or four inches long became affected during the excessive heat and drouth of the past summer. Specimens of some of the pines were sent us by S. Rhoades, Esq., of West Philadelphia, showing a similar result, the tip shoots being dead and the leaves a rusty brown. A fine specimen of the *Pinus excelsa* on our own grounds has mostly perished, the lower branches only remaining fresh; but the leaves have not been discolored as in the other instances, and it may not be precisely the same difficulty. Among several thousand pear trees growing within a short distance, not a single case of genuine fire-blight has occurred this same season; although a few have perished by that peculiar disease of the roots which has been observed of late years. But, in the latter case, the leaves, instead of turning black, as in the genuine blight, have only withered and become light-brown, evidently in consequence of the mere lack of nourishment, the supply of which could not be obtained through the dead roots.

It is obvious that these appearances are more apt to be openly developed (if not caused) during very hot weather, a system of training should be adopted that shall distribute foliage evenly through the head and prevent the sun from striking severely on any exposed portion. Succulent growth, it is well known, renders the tree more liable; and hence, on a good, dry soil of medium fertility, that shall prevent an excessive growth, but favor a healthy ripening of the wood of the shoots, the trees will be more likely to escape.—*Country Gentleman*.

SHELTER FOR GARDENS.—The real value of shelter can scarcely be too highly estimated in many of the delicate operations of modern gardening, and the idea of it when associated with warmth is no less pleasing to the mind in winter. On both grounds the free use of evergreens when forming new gardens or plantations is strongly advocated; they are invaluable for the shelter they afford, and the idea of warmth which they convey. But a garden or pleasure-ground, planted wholly with evergreens, few would be bold enough to advocate; such would be heavy in summer, and monotonous in winter. Evergreens may abound, but they must not superabound. To abound even, they require to be judiciously varied. The free and spreading forms should be mingled with the formal; the large-leaved and small-leaved kinds must be properly arranged and adjusted; the light green, the dark green, the glaucous and the variegated, must be represented in varying proportions to suit the character of the mansion and the surrounding scenery.—*Gardeners' Chronicle*.

VITALITY OF SEEDS.—Parsnep, rhubarb, and other thin, sealy seeds, keep for one year.

Carrot, cress, okra, gumbo, onions, peas, peppers, and small herbs in general, for two years.

Asparagus, egg-plant, endive, lettuce, mustard, parsley, for three years.

Cabbage, cauliflower, corn, radish, sea kale, turnips, for four years.



## Ladies' Department.

### THE WIFE

THREE things a good wife *should* be like, and *three* things a good wife *should not* be like.

A wife should be like *echo* true,  
And speak but when she's spoken to  
But not like *echo* still be heard  
Contending for the final word.

Like a *town-clock* a wife should be—  
Keep time and regularity,  
But not like clock, speak out so clear,  
That all the town her voice could hear.

A wife, domestic, good and pure,  
Like *snail* should keep within her door;  
But not like snail in silvered track,  
Place all her wealth upon her back.

Young man, if these allusions strike,  
She whom as wife you'd hail,  
Must just be like, and just *unlike*,  
The Echo, Clock and Snail.

"Who doubts that?" said I. "Give me a large tub of gold coin to dip into, and the furnishing and beautifying of a house is a simple affair. The same taste that could make beauty out of cents and dimes could make it more abundantly out of dollars and eagles. But I have been speaking for those who have not, and can not get, riches, and who wish to have agreeable houses; and I begin in the outset by saying that beauty is a thing to be respected, revered, and devoutly cared for—and then I say that BEAUTY IS CHEAP, nay, to put it so that the shrewdest Yankee will understand it, BEAUTY IS THE CHEAPEST THING YOU CAN HAVE, because in many ways it is a substitute for expense. A few vases of flowers in a room, a few blooming, well-kept plants, a few prints framed in fanciful frames of cheap domestic fabric, a statuette, a bracket, an engraving, a pencil-sketch, above all, a few choice books, all these arranged by a woman who has the gift in her finger-ends often produce such an illusion on the mind's eye that one goes away without once having noticed that the cushion of the arm-chair was worn out, and that some veneering had fallen off the center-table."

"I have a friend, a school-mistress, who lives in a poor little cottage enough, which, let alone of the Graces, might seem mean and sordid, but a few flower-seeds and a little weeding in the spring make it, all summer, an object which everybody stops to look at. Her æsthetic soul was at first greatly tried with the water-barrel which stood under the eaves-spout—a most necessary evil, since only thus could her scanty supply of soft water for domestic purposes be secured. One of the Graces, however, suggested to her a happy thought. She planted a row of morning-glories round the bottom of her barrel, and drove a row of tacks around the top, and strung her water-butt with twine, like a great harpsichord. A few weeks covered the twine with blossoming plants, which every morning were a mass of many-colored airy blooms, waving in graceful sprays, and looking at themselves in the water. The water-barrel, in fact, became a celebrated stroke of ornamental gardening, which the neighbors came to look at."—*Mrs. Stowe's House and Home Papers.*

### HOW TO MAKE APPLE BUTTER.

PLACE a large copper or brass kettle, well cleaned, over the fire, fill the kettle with new cider in which fermentation has not begun. When it comes to a simmer begin to skim off the scum. As it boils down fill in more cider and skim as before until you have in the quantity you wish to boil. A barrel and a half can be nicely done in what is commonly called a barrel kettle. When the cider is boiled away one-half, or more, dip out six or eight gallons into earthen or stone jars; then fill in for each barrel, or thirty-two gallons of un-boiled cider, one and a half bushels of quartered apples, nicely washed and drained. If the apples are not all put into the kettle at the same time, replace the apples and the cider taken from the kettle as soon as there is space to receive it. Have a slow fire under the kettle while the apples are dissolving to prevent running over. When well dissolved it must be constantly stirred until finished. This is done with an implement made as follows: Take a piece of soft wood, two feet long, one and one-fourth inches thick, two inches wide at top end, four at the bottom, which should be oval; now have a hole at the top, one and one-fourth inches in diameter, and place a handle into it eight feet long. This will enable the operator to stand away from the fire, and yet move it over every part of the bottom of the kettle, and thus prevent its burning. No burning wood should touch the kettle, neither should the blaze rise above the boiling mass. One barrel of cider, and one and one-half bushels of quarters boiled down to about ten gallons, can be kept one or more years. For winter use, two bushels of quarters may be used, and less boiling is required. Before taking it from the fire, season with spice, cinnamon and cloves to suit the taste. Remove the kettle from the fire, dip the apple butter while hot into well-glazed crocks or stone jars, then set away to cool; when cold, cut paper covers for each crock or jar, soak it in whisky, lay it into the vessel on the apple butter, and the work is done. Cider made from sour apples, and sweet apples boiled in it, makes an excellent dish.

COLD CREAM.—We offer the following receipt for cold cream because it is really "cold" and soothing to an irritable skin: Procure perfectly fresh lard which has never been touched by salt; wash it thoroughly in spring water freshly drawn, and do this in three different waters; then leave it to soak in fresh water and in a cool shade for twenty-four hours; then wash it once more and beat it until it becomes a cream in as much rose-water of the stronger sort as it will absorb in the process of beating. When finished the rose-water will have penetrated every part, and should stand in little pools here and there on the soft, porous-like surface.

TO CLEAN CARVED IVORY.—Wash with white soap and water, not very warm, and after rinsing it by pouring cold water over it, wipe it slightly with a soft cloth and place it in the sun to dry. Its color will be quite restored, as the rays of the sun have a bleaching effect upon it.—*Godey's Lady's Book.*





### THE FOX WHO WOULD A WOOLING GO.

THIS little picture is one scene in the eventful life of Reynard the Fox, a part of whose sad story I will tell my little friends in his own words:

"My father was a fox of great talent and virtue, and I have been regarded as not an unworthy son of so good a father. While I was yet young, the deceit and hypocrisy which I found in all my friends and relations made me desire to become acquainted with other animals, and I tried by showing how much I loved the truth and hated lies to make friends among honest people; but alas! no one would believe me. I saw, one day, a nice fat hen walking around in the barn-yard with her little chickens. She looked so round and plump, and had such a kind, honest way with her, that I stopped to watch her; but she looked up and saw me, and with a cry of fright and hatred called her chickens to her and ran away as fast as she could. I called after her in my sweetest voice, but it was useless. She had suffered too much from my brother and sisters to believe me. Day after day I used to go and watch her, and as I looked over into the barn-yard and saw the contented cows chewing their cud, the little calves jumping around and playing with each other, the lazy pigs grunting over their food, the ducks and the geese,

the great gobbler, and the black and the green and the white roosters and hens, all so happy together, I sighed and longed to be among them.

"This hen which I had first seen was called Poulet, and she was the handsomest and best of all. Every time that I tried to speak to her, Towzer, the watch dog, who had a nice little house near by, would growl and snap at me, and if he had not been locked in would have torn me to pieces. At last one day in the fall, just as the grapes were getting ripe, and I began to think that they looked a very nice color, I found Poulet talking with Towzer, who was smoking his pipe in his own door. So I went up to her, and putting my hand on my heart, I told her how much I loved her, how I had tried to be good that she might love me, and that I only wanted to be let into that happy home of hers to be quite different from all other foxes. I prayed and begged her to believe me, and told her how often I had watched her, and how easily I could have hurt her if I had chosen many and many a time, and that I had not showed how sincere I was. At first this made her listen to me, but the next moment she only laughed scornfully and said: 'All very well, Mr. Reynard—very fine talk, sir; but if it had not been for my good friend Towzer here, I am afraid you would not have been so virtuous.' As she said that, Towzer threw down his pipe and ran at me with such a terrible bark and such a great open mouth, that I scampered away as fast as I could go. I came back again a week after, one moonlight night, to look at the nice grapes, but alas! Towzer was there too, and the moment he saw me he sprang toward me and would have torn me to pieces."

What a sad thing it is to have a bad character.



## Miscellaneous.

### A SALMON FIGHT.

INSTANCES of the ferocity of the varied species of bipeds and quadrupeds have been often recorded in the public journals; but we have to narrate a more remarkable occurrence, in the character of the salmon, than we have yet had the opportunity to record. The facts are these: While several cuttermen (of the preventive service) were on their rounds the other day, and bearing along the Findhorn, between Glenferness and Duleiebridge, they observed an unusual commotion among the spawning beds on the ford. On approaching the spot, two large male salmon were seen engaged in mortal combat for the possession of a female. Never did chivalric knights contest for the hand of "ladye fair" more fiercely than these buirdly "lords of the flood." The tranquil bosom of the stream was lashed into foam by the struggles of the finny antagonists; in the mean time the object of the fray was beating silently about, "spectatress of the fight." From the appearance of the stream—dyed with blood, and gradually assuming its former smooth surface—it was evident that the contest was over. One of the salmon at last floundered on the surface dead, and the victor, it may be conjectured, exhaustedly bore off the prize. The men who had the curiosity to watch the fight, as a proof of their story, conveyed the dead salmon to the nearest dwelling. The victorious salmon had torn off the flesh, or rather fish, along the back, from head to tail, to the very bone. In the movement of salmon spawning, the males have often been seen chasing one another, but such a fray as this has not been witnessed by the oldest fisher or poacher on the Findhorn.—*English Paper.*

THE FRIAR OUTWITTED.—The Count of Villa Medina, one of the richest and most powerful of the grandees of Spain, one day entered the church of Our Lady of Atocha. A friar presented himself before the noble count, and asked alms for the deliverance of souls from purgatory. The latter took a doubloon from his pocket and gave it to him. "Ah, my lord," said the friar, "you have freed one soul from purgatory." The donor drew forth another doubloon and gave it to the priest, who, almost beside himself with joy, again expressed his gratitude. The count continued to give doubloons and the recipient to speak his thanks, while he said at the repetition of each gift that still another soul had gone up to heaven. Having arrived at the seventh doubloon, the nobleman demanded seriously of the friar, who still held the money in his hand, "Do you really mean to assure me that seven souls have quitted purgatory for heaven?" "Nothing can be more certain," replied the latter. "Well," said the count, "since they are in that blessed abode, no one can drive them back to purgatory;" and so saying, he took the seven coins from the hand of the friar, and replacing them in his pocket, said he could make further use of them.

### A HORSE STORY.

NEAR Bermuda Hundred there is a large corral, where all disabled and worn-out horses—brought here by General Sheridan after his famous raid—are confined. The poor beasts have apparently but little of their original vigor left. That was what we thought a week or more since. Now we have changed our opinion. During the heavy firing on our right a short time since, these lame and worn-out equine warriors pricked up their ears, straightened their sore and stiff limbs, tossed their manes, formed in squadrons, and, with a loud snort, charged on a number of inoffensive mules. Two mules were instantly killed, and the others fled in the wildest disorder. The horses again formed to the music of Gilmore's artillery, and charged on a high rail fence, which they at once broke down. They did not desist from their warlike demonstrations until the artillery firing ceased.—*Army Correspondence.*

A JOKE FOR SELFISH HUSBANDS.—Lord Ellenborough was once about to go on the circuit, when Lady Ellenborough said that she would like to accompany him. He replied that he had no objection, provided that she did not encumber the carriage with bandboxes, which were his abhorrence. During the first day's journey, Lord Ellenborough happening to stretch his legs, struck his foot against something below the seat. He discovered that it was a bandbox. Up went the window and out went the bandbox. The coachman stopped, and the footman thinking that the bandbox had tumbled out of the window by some extraordinary chance, was going to pick it up, when Lord Ellenborough furiously called out, "Drive on!" The bandbox was accordingly left by the ditch-side. Having reached the county town where he was to officiate as judge, Lord Ellenborough proceeded to array himself for his appearance at the court-house.

"Now," said he, "where's my wig—where's my wig?"

"My lord," replied his attendant, "it was thrown out of the carriage window."

A DESCENDANT of Nabal having put a crown piece into "the plate" instead of a penny, and starting at its white and precious face, asked to have it back, was refused. In once, in forever. "Aweel, weel," grunted he, "I'll get credit for it in heaven." "Na, na," said Jecms, the doorkeeper, "ye'll get credit only for the penny."

COMPLIMENTARY.—Lord North, who was very corpulent before a severe sickness, said to his physician after it: "Sir, I am obliged to you for introducing me to some old acquaintances." "Who are they, my lord?" inquired the doctor. "My ribs," replied his lordship, "which I have not felt for many years until now."

SOMETIMES society gets tired of a man and hangs him. Sometimes a man gets tired of society and hangs himself.

GREAT men have generally little hair. The ladies beg it all.





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## Learning to Write without a Teacher.

MESSRS. BABBITT & WILT, of the Miami Commercial College at Dayton, Ohio, have adopted a system by which persons can learn to write without a teacher. They send one hundred copies, on self-explaining card-board copy slips for \$1.50. We have examined the system, and think it well designed to accomplish the object.

We have made arrangements for procuring complete sets of these copies, with everything complete, and propose to send one of them to any young man who will get ten subscribers to the GENESEE FARMER at our lowest club rates of eighty cents each. Those who wish this valuable premium, will please mention the fact when sending in the club.

HE that tilleth his land shall have plenty of bread; but he that followeth after vain persons shall have poverty enough.—PROV. 28:19.

## THE GENESEE FARMER FOR 1865.

## REDUCTION OF PRICE IN CLUBS.

We are desirous of extending the circulation of the GENESEE FARMER the present year. From the kind feelings expressed in the numerous letters we have recently received, we think our friends are disposed to make an earnest effort to increase our subscription list for the next volume. In order to favor the movement as much as possible, we have concluded to reduce the price of the GENESEE FARMER to eighty cents a year in clubs of five and upwards.

Our terms for 1865 are: Single copies GENESEE FARMER, \$1.00; 5 copies for \$4.00, with a copy of the RURAL ANNUAL AND HORTICULTURAL DIRECTORY for 1865 to the person getting up the club; 10 copies for \$8.00, with an extra copy of the FARMER and RURAL ANNUAL to the person who gets up the club.

Larger clubs at the same rate, or eighty cents a year.

The price of the RURAL ANNUAL is as hitherto—twenty-five cents.

In clubs of five and upwards, the RURAL ANNUAL and GENESEE FARMER together will be furnished for one dollar the two.

## The Rural Annual and Horticultural Directory for 1865.

THE RURAL ANNUAL AND HORTICULTURAL DIRECTORY for 1865 will be ready in a few days. We believe it will be found in no way inferior to any previous volume.

The price will be, as hitherto, twenty-five cents. It will be sent prepaid by mail to any address on receipt of price. Every reader of the GENESEE FARMER should have the RURAL ANNUAL AND HORTICULTURAL DIRECTORY for 1865. In clubs of five and upwards the FARMER and RURAL ANNUAL will be furnished at one dollar for the two.

In all cases we prepay the postage on the RURAL ANNUAL, so that subscribers will receive it free of postage.

## Planting Forest Trees.

THE increasing scarcity of timber has induced the N. Y. State Agricultural Society to offer a prize of \$125 for the "best transplanted forest trees, not less than six feet high, for permanent growth, not less than one acre, and not less than six hundred trees per acre." We should be glad if some one who has had experience would give us an article on the best way of managing wood lots, so as to secure the greatest advantage from the growth of the young trees and underwood.

## To Young Men.

FARMERS' sons who wish to become good writers should not overlook our offer to send a complete set of the "Babbitonian Penmanship" to those who get up a club of ten subscribers to the GENESEE FARMER at eighty cents each. Get up a club; learn to become a good penman; keep your father's books; and write occasionally for the GENESEE FARMER.



**New York Cheese Manufacturers' Association.**

THE Second Annual Meeting of this Association will be held at Utica on Wednesday and Thursday, January 11 and 12. The annual address will be delivered on Wednesday evening by X. A. Willard. Reports are expected from nearly one hundred cheese factories, giving the results of the past year's operations. The following are among the topics to be discussed:

Improved Methods of Cheese Manufacture.

Best Manner of Marketing Cheese: whether direct or through middle-men.

An Uniform Rate of Cheese Manufacture for 1865.

The Best Manner of Organizing Factories: whether by private enterprise, by corporations, or otherwise.

Best Breed of Cows for the Dairy.

Summer and Winter Management of Milch Cows.

Further information can be obtained from the President of the Association, George Williams, or from the Secretary, W. H. Comstock, Utica, N. Y.

**The Genesee Farmer in Canada.**

As long as the present premium on gold continues, the price of the GENESEE FARMER to Canadian subscribers will be: Single subscribers, fifty cents a year; in clubs of five or upwards, forty cents a year.

Our premiums to those who form clubs will be the same as to those in the United States.

If American money is sent, our terms will be: Single subscribers, \$1.00 a year; in clubs of five and upwards, eighty cents a year.

We shall, in either case, prepay the American postage without extra charge.

THE friends of the GENESEE FARMER will be glad to learn that its prospects for 1865 are highly favorable. Our agents are doing nobly. The FARMER is so cheap that a little effort on the part of our friends will double our subscription list.

Dr. H., of New Castle, N. Y., writes:

I send you one dollar for 1865, which will hardly pay for the useful information I receive through almost every SINGLE NUMBER.

L. R., of Oxford, N. Y., writes:

I have had the privilege of reading several agricultural publications, and without flattery I must say that I think the *Genesee Farmer* the most reliable paper of them all.

G. P. N., of Bradfordsville, Ky., writes:

I value the *Farmer* very highly. The "Walks and Talks on the Farm" are alone worth double the subscription price.

**Premium for Farmers' Wives and Daughters.**

TO any lady who will send us thirty-five subscribers at one dollar each, or sixty subscribers at eighty cents each, we will forward, free of charge, one of DORY'S WASHING MACHINES. This machine has been used in our family for several months, and proves every way excellent. Its retail price is \$14.00.

**Southern Refugees in the West.**

MR. A. FURNAS, of Danville, Ind., writes us that in his section "the available laboring force is fully as strong as it was before the draft. Southern refugees more than supply the vacancies made by the last call. It is said that sixty arrived at one time in Henry county."

**The Markets.**

THERE has been little change in prices of grain since our last report. Hogs are much higher. In this city heavy dressed hogs bring from 17@17½c. ¢ lb. In New York live hogs are dull at 13@14½c. ¢ lb. live weight. At the last New York cattle market, ordinary beef cattle were lower, but those of prime quality were higher. Christmas beef sold at 25c. ¢ lb., for the estimated dressed weight of beef. Good cattle brought 20c. ¢ lb. The bulk of the cattle sold at 14c. Inferior, of which there was a large number, sold for 9@10c. ¢ lb. There was an unusual number of poor working cattle in market. Ordinary sheep bring about 10c. ¢ lb. live weight. Some prime Canada sheep that weighed 180 lbs. sold at 12@13c. ¢ lb. live weight.

In this vicinity we hear of sales of prime Durham steers at 10c. ¢ lb. live weight.

**Inquiries and Answers.**

PRESERVING THE NUMBERS OF THE GENESEE FARMER. (M. P. M.)—One of our correspondents says he preserves them by fastening the numbers together with shoe-strings, with tags on the ends.



He says: "As I get the numbers I put them on, and make the holes uniformly with a pen-knife, and at the end of the year, by squaring the edges, I have a good-looking book, besides keeping the numbers together during the year." The plan is a good

one, and will be easily understood by the annexed engraving. One of the principal advantages of a monthly agricultural paper is, that it is in a form convenient for preserving for future reference.

A YOUNG Philadelphian who intends to remove to a small farm of ten acres in the spring, wishes information on the following points:

1. Is it best to get a young and spirited, but gentle horse, or one that is old and steady?
2. Is a mare or horse best?
3. What varieties of apples, peaches and pears are best adapted to a rather clayey soil that has been well cultivated and manured?
4. How should a truck patch be set out, consisting principally of berries and melons—what proportion, &c.?
5. What fruit, apples, pears, peaches or cherries, will be most profitable on such a soil as the above?
6. Which kind of berries will be the most profitable—strawberries, raspberries, blackberries or currants?

We should be glad if some of our readers will give our young friend the benefit of their experience in answer to the above.

WHAT IS A CORD OF WOOD?—(A Young Chopper.) One hundred and twenty-eight cubic feet is a cord. Cord-wood is usually cut into lengths 4 feet long. Such wood piled 4 feet high and 8 feet long is a cord. Your pile of wood, which you chopped in a day, 5 feet high and 11 feet long, would contain 220 cubic feet. This, divided by 128, will give you the answer, or about 1 cord and 7-10—not quite a cord and three-quarters.

Wood sawed and split for the stove will measure about one-tenth more than before it is split; and the



finer it is split the more space it occupies—or, in other words, the more it will measure.

You had no need to apologize for asking these questions. You may have reason to feel ashamed of not being able to make the calculation yourself, but not for seeking information from others. If they are not impertinent, never be ashamed to ask questions.

**RELATIVE VALUE OF HAY AND STRAW.**—(S. H.) As a general rule, one hundred pounds of hay may be considered equal in nutritive qualities to two hundred pounds of straw. Of course, both hay and straw differ materially in value according to quality, time of cutting, the condition in which they are harvested, &c. Good oat or wheat straw, cut before the grain is fully ripe, is almost, if not quite, as nutritious as poor hay.

**TILES TO DRAIN AN ACRE.**—(W. K.) If the drains are 8 yards apart, it will require about 1500 tiles on each acre. There will be about 100 rods of drains on the acre. You ought to get the drains dug from  $2\frac{1}{2}$  to 3 feet deep for 20 cents a rod.

### Cook's Sugar Evaporator.

We especially commend this invaluable boiler to the attention of our maple sugar manufacturers. Six years thorough trial demonstrates that it is without a rival, either in the economy of its use or in the excellence of its work. Its reputation is national.

## ADVERTISEMENTS.

A FEW short advertisements of interest to farmers—and only such—will be inserted in the GENESEE FARMER at twenty-five cents a line, or \$2.50 per square, or \$25 per column, each insertion, payable in advance.

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We have just published the first number of a New Magazine for the young, called

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and all sorts of entertaining and instructive miscellany. Terms, \$2.00 a year for single copies; Clubs much less. *More about it next month.* Send 10 cents for a specimen number and a circular to the publishers, TICKNOR & FIELDS, Boston.



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HAVING purchased the exclusive right to manufacture and vend this GREAT AGRICULTURAL WANT (throughout the United States, excepting the New England and some of the Atlantic and Pacific States,) which has been so thoroughly and satisfactorily tested, I am now prepared to receive orders for them.

A boy fifteen years old, with four good horses, can spade six to eight acres per day, eight inches deep, leaving the field in the condition of a garden-bed when forked.

Depots will be established at Chicago, Milwaukee, St. Louis, Cincinnati, Indianapolis, and other Western and Southern cities, and I shall endeavor by manufacturing extensively to meet the demand; but orders should be sent early to avoid delay and disappointment.

For further information, price, &c., send for circular.

J. C. BIDWELL,

January 1, 1865.

Pittsburg (Pa.) Plow Works.

**A PICTORIAL DOUBLE NUMBER.**—THE PHRENOLOGICAL JOURNAL and LIFE ILLUSTRATED, for January, appears with 32 quarto pages, and a beautiful illustrated Cover. It contains Portraits of Tennyson, Silliman, Sheridan, Cobb, Phillips, Susanna Wesley—mother of John—an Indian Chief, Franz Muller, Miss Muggins, Miss Fury, the Princess of Wales, Florence Nightingale, A Group of Warriors—Hannibal, Julius Caesar, Pizarro, Cromwell, Charles XII, Frederiek the Great, Scott, Wellington and Napoleon, with ETHNOLOGY, PHRENOLOGY, PHYSIOGNOMY, PHYSIOLOGY, and PSYCHOLOGY. No. 1. Vol. 41st. Published at 20 cents a number, or \$2.00 a year, by Messrs. FOWLER & WELLS, 339, Broadway, N. Y. j2t

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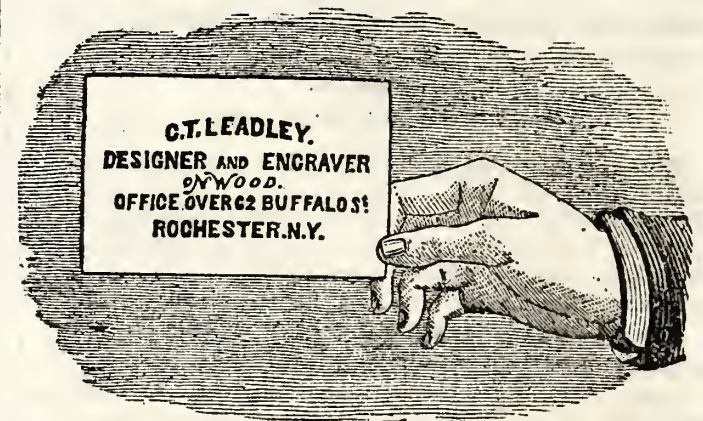
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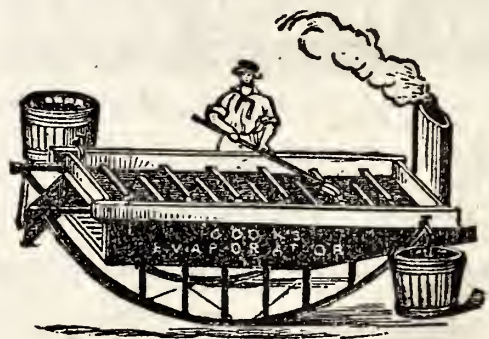
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# THE GENESEE FARMER FOR 1865.

TERMS, PREMIUM LIST, &c.

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## WALKS AND TALKS ON THE FARM.—NO. 14.

AGRICULTURAL editors frequently speak of the "Farmers' leisure season." I have not yet been able to discover any month of the year that answers the description. It is not found in the Spring, certainly not in the Summer, still less in the Autumn, and thus far I have found plenty to do in the Winter. The cattle and sheep require constant care. There is fodder to cut, corn to grind, wood to draw, and a score of little things that keep all the men on the farm constantly occupied. A city lady once remarked that she would not marry a farmer, as she did not like the idea of having him around the stove all winter. A farmer in vigorous health has no business in the house during the day, even in winter. There is plenty to do. If too stormy to work out of doors, he can find profitable employment in the barn or the tool-house.

The wire worm did considerable damage to wheat last fall in some instances in this neighborhood. J. C. Adams, of Alleghany county, writes me that "the best way to exterminate this pest is to summer fallow, or to put the land into some hoed crop. Corn is best, with a sprinkling of pumpkins, or beans, in case the wire worm destroys the corn. Cultivate thoroughly, leaving no grass roots or weeds for them to winter upon, and not a worm will be left to hurt the next crop." He says he speaks from experience, having had his spring crops ruined; corn destroyed and potatoes eaten up. One thing can certainly be said for this remedy: If it does not destroy the worms, it will help to clean and enrich the land.

At one of the Evening Discussions during the late State Fair at Rochester, Geo. Geddes stated that after trying the plan of chopping corn stalks, straw, &c., for cattle and sheep, he had given it up, and the machine which he had used for the purpose had lain idle in the barn for some years. On which T. C. Peters remarked that it was then on its way to his farm, in Genesee county. He had faith in cutting fodder. Geddes had not. On his farm he

raised more straw than he knew what to do with, and his great object was to get it trod down into manure. How I envy him! I am short of straw, and I grudge every forkful that is used for litter. I sowed forty acres of wheat this fall, and put it in pretty well—for an editor; and if the bone dust and artificials do any good, I shall have some straw even if the midge takes all the grain!

But this year I am short of straw, short of corn-fodder, short of hay—and I shall be agreeably disappointed if I can carry my stock through the winter. I wrote to Peters, telling him how I was situated, and asked his advice on different points. In reply, he writes:

"You have the machinery for cutting stalks, straw, &c. That is a good start. As to the steaming, I think if it can be done thoroughly it will pay, but it is a rather expensive operation. Now, if I was situated as you are, I would cut straw, stalks, &c., together, and wet it down with warm water; and to get it I would put down some gas pipe from the steamers to where I had the feed, and heat the water there. But after all, it is not a very great job to carry the water to the feed vat. You may calculate the capacity of your mixing vats by three bushels per day for each cow or horse, and about seven sheep to a cow. By feeding more meal, you can get along with two bushels of cut feed per day. Buckwheat is not a cheap feeding grain. If I had corn, barley, oats and peas, I would mix and grind. No particular rule is necessary, except to make the kinds hold out about equal. The best feed to make milk I ever tried, was four quarts of meal and four quarts of bran scalded together for a daily feed, with cut stalks, also scalded. If cows have any milk about them, this will bring it out. If you do not keep hogs, give the cows the dish water in their slops. Where you have solid feed, like meal or provender, and can scald it, half bran makes a very cheap and nutritious feed. I have never tried cooking feed for horses, generally giving them their grain by itself and their cut feed in the same way. Any way that makes feed palatable to cattle will be a good one, and of that you can judge when on the spot. I have never tried sheep on cut feed, but should think they would do well as soon as they got used to it. I shall buy two or three as soon as I can, in order to try them. If you have plenty of grain, it is no great *knack* to bring through a pretty large stock well on straw and roots. A little watching and changing the feed will be necessary, perhaps, but you will be surprised at how small a quantity of coarse fodder suffices, when it is cut and



properly prepared. Put the smallest quantity of salt in your water, just enough to make it brackish, and the cattle and horses will eat up good. What they leave we put in a box and sprinkle some meal on it, and give to those we want to have the most grain. A little practice will soon enable you to save all the *crumbs*."

I have been feeding sheep with cut straw and corn stalks, and they eat it up quite clean, leaving only a few butts in the trough. They do not waste half as much as when fed uncut. I give them a few roots and about three pecks of meal to a hundred sheep per day. I have about 150 bushels of buckwheat, and am feeding it out, but I find the sheep much prefer the corn meal. Corn is a glorious crop—good to clean the land, the stalks make excellent fodder, and the grain is rich in oil and starch.

I was thinking to-day, as I was feeding the sheep corn stalks and corn meal, whether instead of letting the corn ripen it would not be better to cut it while green. In the case of timothy hay, it is conceded to be poor economy to let it ripen its seed. Why is it not equally so in regard to other crops used as food for stock? If you wish to sell the corn, or feed it to hogs, that is another question; but when you feed the grain, as well as the straw or stalks, to cattle and sheep, what is the advantage of letting the crop get ripe? There can be little doubt (though the point is not settled) that there is a positive loss of nutriment by allowing grain crops to get ripe,—in other words, that the grain and straw together do not contain *as much* nutriment as the crop would if cut after it had attained its growth, but before the ripening process had commenced.

I say the point is not settled. Dr. Voelcker, in his investigations of the "Composition and Nutritive Value of Straw," found that oat straw, from a crop cut at three different periods, viz., when "green," when "fairly ripe," and when "over ripe," contained less and less nutriment as the ripening process proceeded. Of soluble protein compounds, the green straw contained when dry, 6.56, the ripe, 3.13, and the over-ripe, 1.54 per cent.; of sugar, gum, mucilage and extractive matters, the green contained 19.08, the ripe 12.59, and the over-ripe 3.79 per cent. The total per centage of nitrogen in the dry state was: green 1.62, ripe 0.76, over-ripe 0.68.

These are very remarkable results. The amount of protein or flesh forming compounds in *green oat straw* is as large as in ordinary meadow hay. The greater portion of this matter, too, is found in a soluble condition, and would therefore be easily digested. As the straw approaches maturity, this nitrogenized matter dwindles down to less than one-half. "The question arises," says Dr. V., "what becomes of all the nitrogenized matter, which disappears with extreme rapidity when our

cereal crops arrive at maturity? Although I have not made any special experiments with a view of ascertaining this point, it does not appear to me likely that this matter is all stored up in the grain; and I have not much doubt that, as observed by Messrs. Lawes and Gilbert, a considerable loss of nitrogen takes place in the growth of corn crops, which loss is particularly noticeable when the crop arrives at maturity."

Of sugar, gum, and other matters soluble in water, not less than 19 per cent. are found in the green straw, against less than 4 per cent. in the over-ripe straw. These are the most valuable nutritive constituents, and the results show that the straw of oats cut green is four times as nutritious as that allowed to get over-ripe. The sugar, etc., of the straw is turned into indigestible woody fibre. The green straw contains only 25 per cent. of this substance, while the fairly ripe straw contains 32, and the over-ripe 42 per cent. of this indigestible matter.

The Deacon says it does not pay to feed "merchantable grain," and he is probably right. We cannot afford to elaborate the food of cattle and sheep so much. Speed is obtained at the cost of power. It is pleasant to go fast, but it is rather expensive. Cattle and sheep like grain, but it is questionable whether the same amount of nutriment cannot be obtained at a less cost in less concentrated food.

Mr. Peters says:

"The amount of corn fodder which will grow upon an acre is truly fabulous, and no one will believe it until they have had ocular demonstration. It is not a very large thing to grow 200 tons of green fodder to the acre. I think it possible to grow 250 tons, with care and a good season, but it seems so extravagant, that I usually say 100 tons may be grown. I once tried a small experiment on sowed corn, but it was only a small one, and not conclusive on a large scale. I sowed some Illinois corn one year. When it had got well into the tassel, I took the average of perhaps thirty square feet, and selected three stalks, which were under an average, growing upon a square foot. These weighed nine pounds. There were more square feet that had over four stalks than under. A good many had six, larger than the ones I selected, so that it is easy to grow at least nine pounds of green food to the foot. This would make not far from 200 tons. I think I found a shrinkage of nine-tenths in the stalks exposed to the wet run and cured to the worst possible advantage. If you can save a tenth, it makes a very respectable *pile* of fodder for winter from an acre."

This method of estimating the amount of fodder from an acre of corn is not accurate. It is surprising that some one has not weighed an acre, so as to ascertain the exact quantity.

It seems strange to hear the former editor of the "Wool Grower" talking of buying a couple of sheep, to experiment in feeding them cut fodder. He is



feeding 40 head of cattle, but I suppose from this remark that he keeps no sheep. Like all experienced sheep men, he has not much faith in the present excitement in regard to "American Merinos." I asked him whether he thought sheep could be kept solely for wool where land was high, and where an advanced system of cultivation was adopted. I know so little of fine-wool sheep that I dare not trust my own judgment in the matter. I have always thought, however, that fine-wooled sheep belong essentially to a low system of farming, where land is cheap and markets distant. Peters seems to be of the same opinion. Though always a fine-wool man, he says:

"I have no faith in any kind of sheep farming that does not make the carcass of the first importance. Wool should only be secondary. We may have a panic and excitement, as for the past year or two, in fine wool, but it can't be permanent. A hungry population cannot be fed on wool, and mutton will soon take the front rank."

A correspondent of the *Boston Cultivator*, at Southville, N. Y., writes that he has "the past season raised a crop of turnips at the rate of 50 tons per acre. Also a few with extra pains that weighed from 8 to 18 lbs. a turnip, equivalent to 130 tons per acre, exclusive of tops."

I once heard Mr. Lawes say he would go fifty miles to see a crop of Swede turnips that weighed 30 tons per acre. I presume he would cross the Atlantic to see one of 130 tons per acre! He has probably raised more crops of turnips than any man living, and had come to the conclusion that the reports of 40 and 50 tons of turnips per acre were based on estimates, and not on actual weights. The way such big crops are obtained (on paper) is very simple. You weigh a dozen or so of turnips, and find that they average 8 lbs. each. If the rows are 27 feet apart and the plants 10 inches apart in the rows, there would be 23,232 plants per acre; and at 8 lbs. to each turnip, we have 185,856 lbs., or nearly 93 tons per acre.

If we should calculate how many plants of wheat would grow on an acre, and how many ears each plant would grow, and how much they would yield, and then figure up the amount, we should probably get 200 bushels per acre. But we all know that such a crop has never been grown.

When 50 tons of turnips are grown on an acre, the whole crop actually grown and measured, I shall have more patience with such statements as the above.

Our quiet talks on the farm, in some way or other, get into the *Genesee Farmer* every month, and they tell me at the office that they are amazingly popular. They say that a great many of the subscribers write that they like them better than

anything else in the paper, and hope that they will be continued.

John Johnston wrote me some time ago that he was glad to hear that I was *living* on the farm. He thought I still resided in the city. (You know people "reside" in the city, and "live" in the country.) He thought that "the Walks and Talks on a Farm were more ideal than real." I was quite amused. I could no more "make them up" than I could write a book or preach a sermon!

I have always thought that one reason why so few turnips are raised in this country is the want of good drills for sowing the seed on ridges, with an attachment for dropping superphosphate, plaster, &c., at the same time with the seed. Sanford Howard, of the Michigan College, writes me that "this opinion deserves attention," but intimating at the same time that it will not pay to purchase such expensive machines unless we make up our minds to go extensively into the business of raising roots. I do not see, however, why they need be so expensive, but even if such a drill should cost \$50, it would pay for itself in sowing ten acres of roots in a single season.

I am rather a new convert to turnip culture. I had supposed that our dry climate was not well adapted to the growth of root crops; and that even if we could grow them to advantage, the crop is so heavy in proportion to its nutriment that it would hardly pay to store them for winter use. But I was so successful in raising turnips last season, that I am satisfied there is no difficulty in getting good crops; and in regard to storing, if the buildings are properly arranged for feeding them out in a basement stable, with cellars alongside into which the turnips can be dumped from a cart on the outside, the labor is not very great. And that it needs no argument to prove the advantages of feeding some succulent food to stock during our long winter months.

Let us have a good drill for sowing the seed on ridges with superphosphate, and my word for it, turnip culture will soon become a leading feature of our agriculture.

This afternoon we have been grinding peas with a new mill I got a few weeks since from R. L. Howard of Buffalo. The grinding is done by four vertical iron plates rubbing against each other. It works to perfection. Two horses grind pretty well, but as peas are hard to grind, and as I want the meal fine, we put on four horses. We started at a quarter past two. I attended to the mill myself. I did not say anything to Michael, but as he saw me looking at my watch and marking down each half-bushel I put in the hopper, he evidently concluded that I wanted to ascertain how much we could do. He



kept the horses on a lively walk, and I was not slow in letting in the peas. We stopped once for five minutes to oil the machinery, and then kept on till twenty minutes to six. In this time we ground twenty-eight and a half bushels, or about nine bushels an hour.

It grinds corn to perfection, and buckwheat and oats run through it at a great rate. I would not be without it on any account. It is not merely more economical to grind your own grain, but it is far more convenient. If you send it to the grist mill, you either have to wait several hours or go for it the next day.

I have just been reading the report of the Cheese Convention at Utica. I have never had much faith in the permanency of the "Factory System." This question of permanency was alluded to by Mr. Willard in his address, and certainly nothing was brought forward tending to show that the system will be profitable when we return to specie and old prices. The average price of cheese sold by the different factories the past season must be taken at 20 cents per lb. With gold at \$2.25, which may be taken as the average of the past year, this would give us not quite 9 cents per lb. for cheese in specie. The extra 11 cents per lb. now obtained is purely fictitious. Take this away, and where would be our "Cheese Factories?"

A resolution was introduced that  $1\frac{1}{2}$  cents per lb. should be charged for making the cheese the coming season. Add to this the expense of carrying the milk to the factory, and it takes out no inconsiderable slice of the profits.

A number of factories made a report of their operations during the season. The first one on the list is one at Norwich, Chenango Co. The average number of cows was 400; amount of cured cheese, 114,246 lbs.; average price got for cheese, 20.62 cents per lb.; 9.9 pounds of milk required for one pound of cheese.

Taking these figures as a basis, each cow gave about 1,500 quarts of milk during the season, and made 285 lbs. of cheese. If the season was seven months, or say 200 days, this would be  $7\frac{1}{2}$  quarts of milk per day for each cow, and nearly one and a half lbs. of cheese.

Now suppose a farmer lives only two miles from a factory, and keeps fifteen cows; he has to harness up a team every morning for two hundred days to carry  $112\frac{1}{2}$  quarts of milk to the factory. I think this would be worth 75 cents a day, and consequently amounts to \$150 a season. The fifteen cows produce 4,275 lbs of cheese. The charge at a factory for making this, at  $1\frac{1}{2}$  cents per lb., amounts to \$64.13. The two items of taking the milk to the factory and the charges for making it into cheese,

amounts to \$214.13. Now as long as cheese sells for 20 cents a lb., this kind of work may be profitable; but let it fall to its nominal price—the price it now brings in gold—or say 9 cents per lb., and these expenses will eat up all the profits. The produce of the fifteen cows would (4,275 lbs. cheese at 9 cents) amount to 384.75; and deducting the \$214.13, would leave only \$170.62 to pay for milking and keeping the cows! It may be said that when we return to specie the cost of manufacture will be less, but admitting it to be so, it would seem that the expenses would still be so large as to leave little for keeping the cows.

It will be said that cows ought to give double the above amount of milk and cheese. This is true, but it must be remembered that these are *actual* results

Mr. David Humphrey, of Spring Creek, Ind., has sent me a few seeds of a fall squash, which he says comes nearer to a sweet potato than anything he has ever tried. It is very pleasant to receive such gifts from distant friends.

Speaking of squashes, Mr. Paul P. Green, a Pennsylvania blacksmith, writes me that he put a pumpkin seed in a dung heap last spring. The vines ran over the heap, and in the fall bore 21 pumpkins, 13 of which weighed 160 lbs., and 5 others weighed 40 lbs. They dropped off the vines.

Beef cattle took another upward jump in New York this week. There were few good cattle in market, and the best sold for 24 cents per lb.! Considering the quality of the cattle, this is said to be the highest price ever paid in New York. The advance was even greater on inferior cattle than on those of extra quality. The week before, the range of prices was from 9 cents per lb. to 22 cents. This week it was from 14 to 24 cents. When the market is well supplied, inferior cattle are neglected, and the price gives way more than on good animals. When will farmers see that it is very poor economy to raise and feed poor cattle? One would think that these market reports, sent to all parts of the country every week, would open the eyes of all who are not absolutely blind to their own interests. It is just as easy to have a steer that will dress 10 cwt. at three years old as a miserable scallawag that dresses only 5 cwt. The one would bring, at last week's quotations, \$220, and the other only \$45! I have frequently heard people complain that our State and County Agricultural Societies offered more liberal premiums for cattle and sheep than they did for implements and machines. Even if this were true, (which it is not,) it would be perfectly proper. Breeding is slow work, and when you succeed in raising one that takes a prize, you cannot, as is the case with the implement or machine, make a thousand just like it and sell them at high prices. Our Societies should do all in their power to encourage the breeding of good stock.



## THE GOOSE—ITS VALUE—ITS USEFULNESS, &amp;c.

WRITTEN FOR THE GENESEE FARMER BY C. N. BEMENT.

THE value and usefulness of geese is scarcely calculable. Had it not been for the quill of this bird, much of the ignorance of the dark ages would still overshadow the world. Is it not to the agency of it that we are indebted for ninety-nine hundredths of the books in existence? Were not the 500,000 volumes in the Bodlean library of Oxford; the 600,000 volumes in the library at Lyons; the 400,000 in the Royal library of Paris; the 300,000 volumes in the University library of Gottengen; and the 100,000 in the library of Harvard College, as well as many thousands, aye, millions of volumes, too numerous to mention, all or nearly all written by the quills of geese? Let these and all their kindred illuminations become extinct, and where would be our literature and our science, as needful in the realms of mind as the material sun in the Material creation? True, the present century, abounding in novelties, is now furnishing us with pens of steel, and silver and gold, in no less profusion than were the locusts of Egypt; but, still, give me in preference, says a writer, to all such trickery, the quill of an old white gander.

And the goose has other claims on our affectionate consideration. Ask the gouty old man, and fidgety old woman, which is the chief alleviation to their aching bones, and they will tell you it is an old-fashioned bed filled with feathers and the down of geese. How many millions of persons consider this one of the greatest of human luxuries! Who can tell how many midnight watchings it has lulled into the sweetest slumbers? Who can tell how many fretful, crying infants it has soothed into sweet languor of a quiet repose? If there were not untold charms in the feather bed, would it have so many votaries? Would such multitudes be clinging to it twelve hours out of twenty-four, when two-thirds of that time are sufficient for rest, were there not a magical witchery about it found nowhere else?

Recently, however, there has been gotten up a crusade against feather beds as well as against goose quills; and the whole object seems to originate in a conspiracy to drive from the pale of public favor the bird which produces them.

The main profit of the rearing of geese, is in their flesh. So highly prized is the meat of this bird, that a man of Norwich, England, annually fattens thousands for the London market. It is stated that occasionally he has as many as two thousand on his extensive premises at the same time. They are collected from all parts, wherever to be obtained. Some are raised in England, more are from Holland, but the greater part procured from Prussia. For our-

selves, we prefer the flesh of a young, fat goose to that of the turkey. Others may have a different preference. In matters of taste, there can be no conclusive argument. All have a right to their fancy.

It is a common opinion that geese are silly and stupid. Hence, if a biped in pantaloons or petticoats is peculiarly deficient in common sense, he or she is dubbed with the cognomen of goose-head. According to the prevalent apprehensions of gooseology, such designations, in numerous cases, would be very appropriate; but oftentimes, when applied, we think the feathered gentry, of the two races, is the more slandered.

The goose has for many ages been celebrated on account of its vigilance. The story of the saving of Rome by the alarm they gave, when the Gauls were attempting the Capitol, is well known, and was probably the first time of their watchfulness being recorded, and, on that account they were afterwards held in the highest estimation by the Roman people. The story is simply this:—That while the watch-dogs and sentinels of the city at that hour of midnight, were either asleep, or were remiss in duty, a few of the enemy scaled the precipitous and perilous heights which led to the Capitol. The geese, however, heard the noise, sounded the alarm, commenced cackling, and wakened the consul, Marcus Manlius. The alarm was immediately given, many of the garrison were collected, and consequently the assailants were repulsed with a fearful slaughter. And it is certain to all acquainted with the habits of the bird, that nothing can stir at night, nor the least or most distant noise can be made, but the whole flock are aroused, and begin to hold their cackling converse; and on the nearer approach of apprehended danger, they set up their more shrill and clamorous cries. Even the cunning and stealthy fox is almost always foiled in his schemes for a late supper on goose. He is too wily to fail in making a sudden retreat whenever the old gander wakes up the dog or the wearied farmer; for he seems to have an unconquerable aversion to the smell of gunpowder, or the sharp, white teeth of that quadruped. On account of this trait in the character of the goose, it is by many persons esteemed the best of all country protections against the depredations of horse thieves and burglars.

The goose has been supposed as long lived as the swan, and numberless instances have been recorded of their having outlived the age of man. Moubay, indeed, mentions as an established fact that there was, in 1824, a goose living in the possession of a Mr. Hewson, in Lincolnshire, England, which was then upwards of a century old. It had been throughout that term, in the constant possession of Mr.



Hewson's forefathers and himself; and, on quitting his farm, he, with a feeling which does him credit, would not suffer it to be sold with the other stock, but made a present of it to the incoming tenant,—“that the venerable fowl might terminate its career on the spot where its useful life has been spent such a length of days.”

### THE FARM HOMESTEADS OF ENGLAND.

SUCH is the title of a magnificent work recently published in England, containing a “collection of plans of English homesteads existing in different parts of the country, carefully selected from the most approved specimens of farm architecture, to illustrate the accommodation required under various modes of husbandry, with a digest of the leading principles recognized in the construction and arrangement of the buildings.

“The work fills a large quarto volume, containing full plans and descriptions of 24 of the best homesteads in England. The Royal Flemish farm homestead is the first of the series. It illustrates the plan of covered yards, which is one of the foremost methods now adopted by farm architects. There is here accommodation for 12 horses and 100 head of cattle. Thorney farm, in Cambridgeshire, the property of the Duke of Bedford, is then described. The homestead here is on the plan advocated by Professor Low, where the buildings, classed according to their uses, are arranged systematically in a long rectangle, with the open yards facing south. The parallelogram has this advantage, according to Mr. Mein, who erected these buildings, that where brick is the material used, as the shelter sheds divide the yards, they by their weight of roof protect the division walls from damage occasioned by the pressure of manure or the rubbing of heavy stock. Thorney is a fen farm of 500 acres. There is accommodation here for 76 head of cattle, in a succession of yards arranged end to end in a long parallelogram. Brickden New Farm, the property of Colonel Linton, has a simple homestead accommodating 40 cattle and 12 horses. The buildings are here arranged around a square divided into two yards by a central detached piggery. In the Maisemore farmery, near Gloucester, which is adapted mainly for the accommodation of stock, the central division is a main portion of this accommodation—the whole ground plan forming a trident, of which the central line is thicker than the other, providing two rows of boxes. The North Brook farm, at Kirtlington, near Oxford, is another capital illustration of the covered yard system, or rather of the combined covered and open-yard plan, in which provision is made for all kinds and ages of stock. Toothill farm, the property of Lord Palmerston, is a trident arrangement, with a

short prolongation of one of the side row buildings for the accommodation of horse-power, gangway and hay loft. Uphampton farm, near Shobdon, Herefordshire, is an instance of covering the ground plan by a lower and closer roof. There is here accommodation for 100 head of stock, and elaborate farm machinery for the preparation of food, threshing of produce, cider making, &c. The whole cost, with machinery, 4500*l.*, or 8*l.* per acre of the farm, of which it is the very complete equipment. Longleat Park farm, in Wiltshire, is furnished with capital buildings by Mr. Wilkinson, architect, of Oxford. They cost 7,000*l.*, and include large covered yards, stalls, boxes, barn and food stores, piggeries, &c. There is accommodation for 18 horses, 17 cows, 14 fattening beasts, 30 pigs, and 30 head of loose cattle. The Tattenhall Hall farm, in Cheshire, is an extremely well designed and very original arrangement, by which the labor of a large cow-house and dairy is reduced to a minimum. It accommodates 80 cows and 26 other stock, besides nine horses and many pigs; and the cost was only 1600*l.* The main feature is the central cow-house, with barns and food-houses, all in convenient connection. Stables and cart-sheds are detached. Many other examples of good homesteads are given, and with reference to each, the character of the farm—its mode of cropping—its quantity of stock—the character of the soil and of the rainfall—and the cost of the erection is given. Then follows a chapter on farm machinery, with particular descriptions and elevations of Lord Bateman's machinery at Uphampton, and of Mr. Hegan's machinery at Dawpool, and of Mr. Garth's machinery at Haines Hill, and of Mr. Page's machinery at Southminster. A chapter follows on farm-houses, with ample illustrations, in which the same rule is followed of giving instances actually erected—and another on laborers' cottages, with a collection both of examples and designs.

“The rest of the volume contains a digest of the principles recognized in the construction and arrangement of approved farm buildings, in which the facts so industriously collected and so perfectly presented to the reader in the former part of the volume, are collated and discussed, in order to bring out the principles which should guide the reader in adapting any of the examples before him to his own particular circumstances.”

REMEDY FOR CHILLBLAINS.—At this season of the year many are troubled with chillblains. When they come in from the cold and seat themselves by the stove the feet begin to itch most intolerably, and swell. Now, I suffered much and tried many things, till, as a last resort, I applied *kerosene oil*. Two applications cured them up. Try it, sufferers. J. L. HERSEY.



## A NEW VIEW OF THE ACTION OF GYPSUM OR PLASTER.

MONSIEUR DEHERAIN has been lately conducting some very important experiments to show in what manner the absorption of potash by plants is really effected. The experiments are in fact so important that we hasten to give them all publicity in our power.

In the first part of these researches the author points out how and for what crops the farmer and the gardener may apply gypsum with great advantage; and, on the other hand, how they may be at the expense of applying it with no advantage at all. This, therefore, is an important matter, deserving of serious consideration. We need not enter into all the minute details of the elaborate and carefully-conducted chemical analyses and experiments by which the author arrives at his conclusions; but we shall state sufficient to call attention to the subject.

Farmers (says M. Deherain) have long been aware of the remarkable effects produced by gypsum on artificial meadows; they admit that it increases by one-third or even by one-half the crops of clover, lucerne, and sainfoin; but what distinguishes this substance from others that are employed for promoting vegetation is its great effect on leguminous plants, and its having none whatever on cereals. M. Deherain's experiments proved—That gypsum applied to arable land does not assist nitrification: no nitric acid being formed in consequence of its application. That moreover it does not promote the formation of ammonia. But that it does promote the solubility of potash buried in the soil.

If we examine, in the first place, what plants are benefited by gypsum, we shall find that they are such as are rich in potash, namely leguminous plants, especially clover, sainfoin, and lucerne; and the vine, which takes up a considerable quantity of potash from the soil, is also manured with gypsum in some countries.

An old observation of Schwertz is very much in accordance with this view of the subject. That agriculturist asserted that gypsum cannot promote the growth of clover on certain stiff soils; but he adds, that its unsuitability is frequently overcome by manuring with ashes. Gypsum, in fact, does not create potash, it can only set it at liberty, and render it soluble; and if the potash is entirely absent the gypsum has no effect; but ashes themselves contain potash, and give to the soil the element without which leguminous plants could not grow.

Some experiments have shown that the potash becomes soluble almost immediately after the gypsum has been applied. This explains why agriculturists recommend the application of gypsum to the

growing crop rather than to the soil before sowing. In either case, it seems that gypsum acts only on the soil; but if it liberate or render soluble the potash whilst there are no plants to take the latter up, it may be carried off by rains and lost; but if, on the contrary, the plants are in a growing state, potash will be absorbed by them as it becomes dissolved under the influence of the gypsum.

"I have stated," says M. Deherain, "that gypsum produces little or no effect on cereals. If we examine the composition of the ashes of those plants, we find that they contain considerable quantities of phosphates and large quantities of silica, and we know that nitrogenous manures are absolutely necessary for them. Now, we have seen that gypsum neither promotes the formation of ammonia nor that of nitric acid, and we have stated that the solubility of the phosphates in weak acids is not increased by gypsum; whilst experiments prove that the latter acts with far less energy than lime in rendering silica soluble. It thus appears that none of the elements of cereals is rendered more soluble by gypsum.

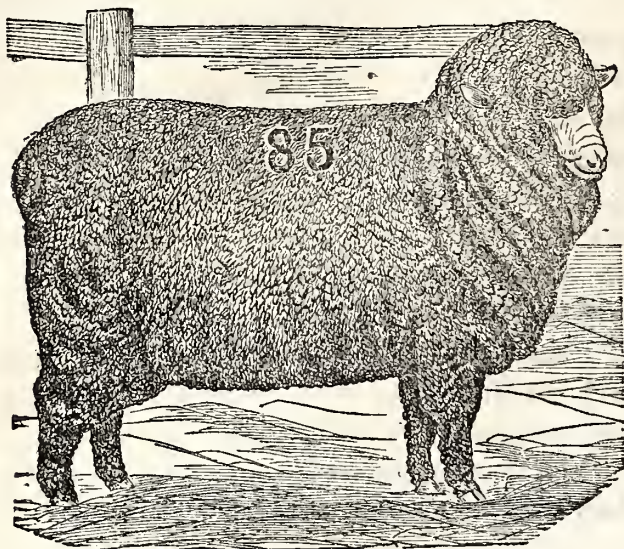
"Nitric acid, soda, chlorine, and sulphuric acid are but little retained by arable land. They are chiefly found in the water that runs off by the surface, and in that of the drains in well manured land; but potash, ammonia, and phosphoric acid are retained in the soil. Gypsum and lime are employed to dissolve the last three elements, and although the actions of these have some points in common, yet in others they are widely different.

"The object of supplying gypsum to arable land is to liquefy the soluble salts which the soil usually retains, and permit them to be dissolved from the soil by water, so that they can be absorbed by plants. In this way, to use an expression now usually adopted, we may consider gypsum as an assimilating agent.

"The action of lime is not entirely similar. It attacks insoluble matters and transforms them. I still uphold what I stated some years ago on the effects which it exercises on the insoluble phosphates. M. Boussingault has likewise shown that lime attacks insoluble nitrogenous matters, and renders them capable of assuming the form of ammonia; lime, then, is also an assimilating agent, but its action extends to insoluble matters. It acts by chemically decomposing certain substances, and causing them to take a different form. Gypsum, on the contrary, seems to act physically by setting free soluble substances that are shut up in the soil. As lime is the assimilating agent of the phosphates and of nitrogen in the state of ammonia, so gypsum is the assimilating agent of potash."

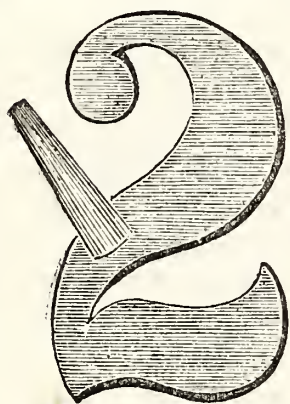
To us it seems that these very curious statements are of at least as much interest to the gardener as the farmer.





TODD'S STAMPS FOR MARKING SHEEP.

THIS cut represents a sheep marked by stamps invented by A. Todd, Jr., of Ontario, N. Y. While the plan for numbering and registering sheep is not new, yet it is not generally practised by keepers of sheep. We have before us a set of the digits from 1 to 0. One of these figures is given in the following cut. The figure is large, with a stem upon its



upper surface, as they all have, and when dipped in good coloring matter and stamped upon the shorn or unshorn sheep leaves a distinct impression, as seen above.

Mr. Todd says: "At shearing time I carefully examine every sheep as to form, (before and after shearing.)

length of staple, quality of wool, weight of fleece, &c., all of which is noted for future reference; and there is no time when so thorough an examination can be made as at shearing. It is almost impossible to select from a flock of sheared sheep, without numbering and registering, such as should be disposed of or kept for stock. Refer to the register and you can readily select the ewes having the finest quality of wool, the longest staple, the heaviest fleeces, &c. Using such ewes for stock, as like begets like, it is evident a flock can be very rapidly improved. Sheep numbered as shown in the cut above, save much time at yeaning; as, for instance, No. 58 may refuse to own her lambs. If the sheep are in the field, the lamb may be taken to the house, and at night, when the sheep are yarded, one can readily select No. 58 from the flock. If a sheep is lame, drooping, or from any other cause requires special attention, it can at any time be selected from the flock, though the flock may or shall consist of hundreds. The stamp represented by the above cut is probably the most convenient form in use. By holding the stamp handle precisely like a pen a

perfect impression is made, whether the wool is long or short. The size of the stamp is  $3\frac{1}{2}$  inches."

Further information relative to this improvement may be obtained by addressing Mr. Todd, as above, who will furnish an illustrated circular containing full directions for marking, registering, composition to be used, &c. Mr. T. will send a set of figures by express, charges paid, for \$2.25; the same with the initials of purchaser, \$2.50. Two sets, \$4.00; four sets, \$7.00; six sets, \$9.00. Initials 25 cents additional per set.

#### POULTRY MANAGEMENT IN FRANCE.

IN some districts of France the farmers appropriate rooms called "couver" for their setting hens, round which are laid planks raised on tressels about 18 inches from the ground; on these planks are placed little baskets of osier, close made at bottom and round the sides, but with widely barred tops; each of these baskets contain one hen. Some of these couvoirs are adapted to hold from 300 to 400 hens; which are all taken off at intervals to feed, and to have their legs washed and cleansed. The hens are generally set in lots of from 6 to 10, so that at hatching time the broods may be increased or diminished, according to the success of each hen. The coops in use for the broods are large, and a hen is often allowed from 18 to 24 chickens. As fast as the chickens are hatched they are taken with the hen that is selected to act as mother to them to an orchard or enclosed space, and are there fed and tended until big enough to shift for themselves.

MAKE YOUR OWN NEATS-FOOT OIL.—A correspondent of the *Germantown Telegraph* tells what they do with beeves' legs in his family:

"The hoofs are chopped off, and the other portions are cracked and boiled thoroughly. From the surface of this boiled mass, about one pint of pure *neats-foot oil* is skimmed, which is unsurpassed by any other oleaginous matter for harness, shoes, &c. After the oil is taken off, the water is strained to separate from it any fatty particles that may remain, and then it is boiled again, until upon trying, it is found it will settle into a stiff jelly. It is then poured into flat-bottomed dishes, and when cold cut into suitable sized pieces. It hardens in a few days, and you will then have a very fine article of *glue*, free from impurities of every kind, sufficient for family use for a twelve-month.

"By taking a portion of this glutinous substance before it becomes too thick, and brushing it over pieces of silk, you will have just as much *court-plaster* as you desire, inodorous, tenacious, and entirely free from those poisonous qualities which cause (as much of the article sold by apothecaries does) inflammation, when applied to scratches, cuts, and sores."



## SALT FOR STOCK.

EDS. GENESEE FARMER: Having noticed an article occasionally in the *Farmer* on the subject of salting stock, and in the January number an extract from an article in the *Germantown Telegraph*, advising farmers not to give salt to stock, I wish to say a word on the subject:

1st. We should consult the natural taste of the animal. If salt be not healthy, and even necessary, how is it that they so crave it? Deer and buffaloes, in a wild state, go long distances for it. Man in all countries uses it. Cattle on the seashore drink the seawater. If not really required by their systems, why do such animals so universally seek it?

2d. Universal practice. Men always use it when it can be obtained. They as invariably give it to their cattle. Is it possible a practice so general, and coming down to us from the remotest times, can have no foundation in the necessities of the animals themselves?

3d. My own limited observation and experience.

I find my sheep do not eat as well when they are without salt as they do when they have a regular supply. I have a salt-box in my sheep shed, in which I aim *always* to keep salt. (I wish all my stock were as steadily and constantly supplied with it.) If the salt is all eaten up, the sheep soon tell me of it. And I think this is particularly needed when they are on grass. If I observe any of the sheep scouring, I add a little wood ashes to the salt, mixing them carefully, and I never fail to cure the sheep at once.

I have a cow also that calls for her salt as surely as she calls for her feed. If I am in haste to put flesh on a horse, I give him an extra quantity of salt, and can always perceive the increase of appetite, and consequent increase of flesh.

But I have already occupied too much space. I wish other farmers would give us the benefit of their experience in this matter.

Bevis, Ham. Co., Ohio, 1865.

J. P. WATERHOUSE.

CHANGE OF SEED.—T. E. Willoughby, of Ogle county, Ill., writes the *Genesee Farmer* that he obtained some seed corn last year from Joseph Wright, of Waterloo, N. Y., and "had a large crop." Mr. Wright sends to the West for his seed corn, (Ohio Dent,) and we suppose the object in a Western farmer getting his seed from him, is that after it has been grown in this more northern latitude it will be earlier. Corn ripens earlier as we go North, and when taken South has a *tendency* for a year or two to ripen at the same time—and is consequently earlier. With wheat the case is reversed. Wheat ripens earlier as we go South, and for this reason it is desirable to get seed wheat from a more Southern latitude.

## FEEDING COWS IN WINTER.

MR. BURN, in his new volume of "Outlines of Modern Farming," says on the winter feeding of cows:

"Dr. Voelcker, as corroborative of the fact, which seems obvious enough, but, nevertheless, is really very much overlooked by dairymen, that the food has an influence on the quality of the milk, mentions that the cows of the Agricultural College, when taken in from the scanty supply of the grass in the October fields, and placed in stalls, and fed with hay, roots, and meal, the quality of the milk increased at once, and gave  $4\frac{1}{2}$  per cent. of butter in place of  $3\frac{1}{2}$  per cent. when not so treated; the evening's milk, after the cows were out all day at grass, yielded only 3 per cent. of butter. In the winter months the cows were wholly kept in doors, when the milk was at once more abundant and richer in quality. In February the daily food was as follows:

At  $6\frac{1}{2}$  A. M. 12 lbs. of hay.  
 9 " 15 lbs. of mangels, cut fine, and mixed with  $3\frac{1}{2}$  lbs. of straw chaff and 1 lb. of hay chaff.  
 11 $\frac{1}{2}$  " 4 lbs. of rape cake.  
 3 $\frac{1}{2}$  P. M. 15 lbs. of mangels, cut fine, and mixed with  $3\frac{1}{2}$  lbs. of straw chaff and 1 lb. of hay chaff.  
 5 " 12 lbs. of hay.

"We now give brief details of other modes of feeding, the first being taken from the *Agricultural Gazette*:

"Half a cwt. of turnips, 16 lbs. of hay, and 24 lbs. of wheat and oat straw daily are very large rations for a small cow—say 6 score a quarter. Cut the straw into chaff, mixing a very small quantity of hay, and pulp the roots, mixing them all together. You will thus save much hay."

"The following is the mode detailed in the Prize Essay on 'Dairy Management,' published by the Yorkshire Agricultural Society, and of which the Rev. Mr. Pulline is the author:

"It is a good plan to take up the cows as soon as the nights become cold—say the middle of October—as the white frosts which occur about that time cause them to run off their milk. They are turned out during the day till the middle of November, if the weather keeps fine. From that period till May day they are kept entirely in the house, except being turned out a few minutes every afternoon to water. They are milked at half-past 5 o'clock, morning and evening. As soon as the man who feeds them comes in the morning, the dung is all removed, and each cow has a feed of 28 lbs. of roots:

At 7 A. M. 7 lbs. of chopped hay.  
 9 " A pail of water, with  $\frac{1}{2}$  lb. of bean meal stirred into it.  
 10 " 2 lbs. of linseed cake.  
 1 P. M. 7 lbs. of chopped hay.  
 2 " Turned out to water, and then 2 lbs. of linseed cake.  
 5 " 28 lbs. of roots.  
 8 " 7 lbs. of chopped hay.

"On this system of management five cows produced in seven weeks, from the 25th of March to the 10th of May, 191 rolls of butter, 24 ozs. to the roll—equal to about 254 lbs., 16 ozs. to the lb. To



this must be added, 154 quarts of new milk, and 42 quarts of cream, consumed in the house. The milk was not regularly measured, but averaged about 60 quarts per day."

#### NOTES FROM LEVI BARTLETT.

##### TALL OATS.

EDS. GENESEE FARMER: In the January number of the *Genesee Farmer* it is stated that "California beats the world in agricultural products, and that the editor of the *Carson City Post* had sent to him a bundle of oat straw six feet high."

I now have on hand a bundle of oats of my own raising, the straw of which averages  $6\frac{1}{2}$  feet. To prove that there is no mistake in this, I forward a sample, which on measurement you will find to be 6 feet 9 inches high.

Several years ago, I received a small package of oats from the Patent Office, marked "Potato Oats, from England." In course of two or three years, I grew enough from that small beginning to seed half an acre, which yielded 40 bushels by measure, or 50 bushels by weight, the oats weighing 38 lbs. per bushel. The next season my oat crop was nearly ruined by multitudes of the aphid, or plant lice, the oats only weighing about 24 lbs. per bushel. I saved a barrel of the best of them for seed, but by a mistake of the person who had charge of my horse, they were fed out. All I now have to start upon again, is what I may obtain from the sample sheaf now on hand. The straw was so tall and heavy that it could not be cut with a grain cradle, and the sickle was used in harvesting, and the stubble was left from  $2\frac{1}{2}$  to 3 feet high, which was afterwards mown, and saved for littering my hovels, &c. As we had no rains or high winds for several weeks preceding their ripening, there were scarcely any lodged oats on the half acre.

Allen, in his *American Farm Book*, says: "The potato oat has large, plump, rather thick-skinned, white grains, double and treble, with long straw. It is now almost the only kind raised in the north of England and south of Scotland, and brings a higher price in London than any other variety."

I have for the past two years grown the Poland oat. Mr. Allen says: "The Poland oat, known by its thick, white husk, awnless chaff, solitary grains, short, white kernels, and *short*, stiff straw. It requires a warm, dry soil, but is very prolific."

The past dry summer was hard on the oat crop in this section of the country. But my Poland oats weigh 35 lbs. per bushel. I send with this a sample of the oat in the straw, which you will see is not so very *short*.

##### TURNIP SEED.

You say you "intend to set out some turnips for

seed next spring." A very good intention. I have time and again raised turnip seed for my own use of several varieties. And the seed has produced as good crops as any imported seed. By growing my own, I find no difficulty in "getting pure seed from well-selected bulbs." As a general rule, "like produces like." I selected some fine turnips last fall for planting out for seed, viz., Laing, Purple top, Ashcroft's, Swedish, and Skirving's. But shall plant them at such distances that I think they will not mix or hybridize.

##### WINTERING STOCK.

At page 18 of your paper, you have an article on wintering stock in England, by Mr. Curtler. I am not sure that I rightly understand him. He says "he can afford to give his cows a peck of maize (Indian corn) per day, and by this means he could keep them at the rate of 4s. 6d. per head per week." Now, does he mean to have us understand, that he could give each of his cows a peck of corn per day, and keep them at the rate of 4s. 6d. per week? Is not seven pecks of corn and the necessary amount of straw or hay to feed a cow for seven days worth but one dollar in England? Corn here is worth \$2.25 per bushel, consequently seven pecks of corn are worth, here, \$3.93 $\frac{1}{4}$ . But this is paper money price. I doubt whether corn can be bought for less than one dollar per bushel, in gold, in England, and if so, then the seven pecks would cost \$1.75. A good sized cow will consume at least 36 lbs. of hay per day. Hay here is worth \$25 per ton—consequently it would cost 45 cents per day, or \$3.15 per week, to keep a cow in this part of the Granite State. Perhaps you can explain Mr. Curtler's statements to the satisfaction of your readers.

Warner, N. H., January, 1865.

LEVI BARTLETT.

FARMERS' PAINT.—Farmers will find the following profitable for house or fence paint: Skim milk, two quarts; fresh slaked lime, eight ounces; linseed oil, six ounces; white Burgundy pitch, two ounces; Spanish white, three pounds. The lime is to be slaked in water, exposed to the air, and then mixed with about one-fourth of the milk; the oil, in which the pitch is dissolved, to be added, a little at a time, then the rest of the milk, and afterwards the Spanish white. This is sufficient for twenty-seven yards, two coats. This is for a white paint. If desirable, any other color may be produced; thus, if a cream color is desired, in place of part of the Spanish white, use the ochre alone.—*Working Farmer*.

WATER-PROOF GLUE.—Render glue perfectly soft, but not liquid, in cold water. Then dissolve it by a gentle heat in *linseed oil*. It dries almost immediately, and water will not affect it.—J. L. HERSEY.



## LETTER FROM MISSOURI.

EDS. GENESEE FARMER: I have so many things of interest to say to the farmers of the Eastern States, that I fear I can not put them all in one letter. Out here, beyond the Mississippi, we like the "*Genesee Farmer*" so well, that we wish a good many more New York farmers would come and help us improve and enjoy this great country. Hannibal is situated on the Mississippi river—the eastern terminus of the Hannibal and St. Joseph R. R., whose western terminus is St. Joseph, on the Missouri—a stretch of distance of two hundred miles on a straight line.

And, for all the purposes of agriculture, there can hardly be found any more beautiful country than that portion of Missouri lying north and east of the Missouri river and west of the Mississippi, between St. Joseph and Hannibal. Fifty bushels of what is called sod corn are often raised to the acre. In 1860, Missouri produced almost 73,000,000 bushels of corn, a larger amount than any other State in the Union, excepting Illinois.

Now, that Price has been ignominiously driven out of the State, and every rebel hope, in regard to Missouri, utterly crushed and destroyed, the people are looking forward to the renewal of emigration to this fair and beautiful State. The loyalists, tried by fire, want the desolated farms of rebels, who have gone into the Southern army or are killed, cultivated again.

Slavery, whatever its merits or demerits, is practically a thing of the past in Missouri. That institution, which deterred so many Northern farmers from settling in Missouri, is now powerless, and will soon be utterly extinct. We have nothing to fear or to hope from it.

The climate of Missouri is very fine. We escape the severe and long winters of the North. Neither do we have the enervating influence of a more Southern latitude. Here we can produce even cotton, but sorghum, tobacco, flax and grain, grapes and orchard fruits, are produced to perfection. In 1860, more than four million bushels of wheat were raised. Nearly three hundred thousand bushels of rye; nearly four million bushels of oats, and more than twenty-five million pounds of tobacco. Missouri had less than three million acres of improved land in 1850. In 1860, more than six millions of improved acres. She has more than thirteen millions of acres of unimproved lands, while Illinois has about eight millions of unimproved lands. But, Missouri is a great State, more than half as large as England, Scotland, Ireland and Wales put together, and Massachusetts added.

Peace and order are restored through the State. It has about twelve hundred thousand inhabitants.

There are many thriving towns, of from one to three thousand inhabitants, lying on the Hannibal and St. Joseph R. R. North Missouri, by reason of its smooth prairies, all ready for the plow, is better fitted for agriculture than the central or southern parts of the State, which are broken or hilly. It is far better wooded than Illinois, and it has accessible markets, by its rivers and railroad lines. The lands of the Hannibal and St. Joseph R. R. are exceedingly cheap and desirable. The same land in New York would command sixty to one hundred dollars an acre, forty dollars in Ohio, and from twenty-five to fifty in Illinois. But it can be purchased here from five to fifteen dollars an acre. Location near towns enhancing the value, while the quality remains the same.

It is a great mistake for farmers to come out here and buy immense quantities of land, unless they propose to farm upon a very large scale. A fertile and rich soil, of forty acres, which may be purchased for two or three hundred dollars, on a long credit, if desirable, might be taken up by men of small means, and as much more laid out in improvements on the land; and the whole could be paid for in two years, with the high price that agricultural products have obtained the last few years. At the present time, a farmer who raises twenty hogs, (and one hundred is nearer an average,) weighing 250 pounds each, could sell them at his door alive, for ten cents a pound, which would pay him 500 dollars.

The ease with which crops are raised, and money made, fosters a spirit of waste, and indolence, which astonishes Eastern men. Let New York farmers come out here with their thrift and habits of industry, and settle on these prairies, and they could not escape making a competence, if not a fortune. And, the opening Spring will be just the time to establish emigration in Missouri. Let companies organize and come out together, and help one another. Let each person subscribe, and pay in advance, for the *Genesee Farmer*, before he comes.

There never probably was a more favorable opportunity for investment in choice lands, at low prices, than there is now in North Missouri. These lands will double in value, in less than three years. As, in the revolution, a great many of the soldiers, instead of settling down in their former homes, made new ones in the wilderness, and the West, so now, on the return of peace, thousands of soldiers will make their homes in Missouri, rather than live in the East, or go beyond the Missouri river. It is a fact not generally known in the Eastern States, that the great agricultural limit, beyond which little can be done, except in stock raising, lies near the Missouri river. Large portions of Nebraska will never



be settled by the farming interest; and the same is true of much of Kansas.

The land east of the Missouri river is infinitely better than that west. The great territory lying between the Rocky Mountains, and approaching the Missouri river, loses its fertility as you go west of the river, and shades off into the great sand plains. Practically, the great valley of the Mississippi is limited to the eastern bank of the Missouri river, beyond which the land grows poor, and the climate is liable to frequent drouths. These facts are known to residents in the far West, and are known to the government, but are not generally known in the Eastern States. For these reasons, Kansas and Nebraska, and territory lying west of those sections, will not be largely populated. But the tide of emigration will flow on across the Mississippi, and fill up North Missouri. I have traveled through many States and am familiar with the East, and I know not where cheaper and better land can be obtained than in this wonderfully rich State of Missouri. Missouri needs Eastern emigration; and Eastern emigration can be benefited by settling here. We welcome them to our towns and to our lands. We need them, and we have that which they need.

Hannibal, Missouri, Dec. 16, 1864.

M. W. W.

#### NOTES BY S. W.

**THE AMELIORATING EFFECTS OF CLAY ON A SANDY SOIL.**—The hygrometrical or absorptive power of a loose, sandy soil, treated with a light coating of clay, is illustrated by an experiment made by Mr. Comstock, near West Canada Creek, Herkimer Co., in this State. He says that during a trying drought, a poor, sandy soil that he had treated with a coating of blue clay the year before, now stood the drought well, yielding a good crop of red clover, while the other part of the field, unclayed, remained parched and dry, presented a scanty vegetation, hardly worth harvesting.

Again, the soil thus clayed was so permanently benefited, that it required less than half the stall manure to enable it to produce good crops that was required by the sandy surface not thus treated with clay; thus proving that the constant requirement of a sandy soil for heavy manuring, is entirely due to its lack of the alluminous principle which enables it to hold the escaping gasses of decomposing manures for the benefit of the growing crop.

There are thousands of acres of scrub oak and pine plains on Long Island, within two hours by rail of the city of New York, all arable land, needing no underdrains, a sandy loam surface and coarser subsoil; but making a compact and perfect race-course roadway. To grow the best of red clover, these plains have only to be cleared and burned over,

but for continuous cropping, the soil needs the alluminous principle in a coating of clay, which, when worked in, gives adhesive absorptiveness to the soil, without which there can be no lasting fertility short of continued heavy manuring.

**SAND ALONE WILL NOT AMEND A CLAY SOIL.**—The immediate effect of sand applied to clay is to make it into a more adhesive mortar, and anthracite coal ashes, unless in large proportion, will have the same indurating effect; but if coarse vegetable or stall manure, or a stiff clover sod is applied with the sand, and both are plowed in, in the fall, so that the frosts of winter can act on the furrows, then a thorough amelioration takes place, and you have the next season a friable soil of great fertility, capable, with subsequent good tillage, of standing both wet and drought. But to keep up this condition of the soil, it must be well underdrained, and an occasional rotation of a clover crop, with the sod and a little manure plowed in, must not be omitted. The action of frost on clay is allied to that of burning the clay; the alluminous base of clay seems to lose its strong adhesiveness by burning, and the finely comminuted sand that is precipitated is identical, apparently, with the fine sand of the richest river bottoms, which it has been said can not be worn out by ordinary cropping. At any rate, such a soil is more capable of holding water by absorption, and decomposed organic matter by chemical attraction, than any other equally absorptive soil. According to Thayer, a rich alluvial soil contains 74 parts clay, 10 parts sand, 4 parts lime, and 11 parts organic matter; but it must be remembered that the alluvial clay contains much more finely comminuted sand than its metallic base alumina.

The bi-monthly report of the National Agricultural Department for September and October, does great credit to the Commissioner, Isaac Newton, as a man of both industry and practical ability. The mass of information he obtains *gratis*, on agricultural statistics at home and abroad, and the correspondence of our best farmers on wheat growing improvements, are of great interest to all would-be progressive farmers, as well as to the whole country generally.

A masterly farmer of Knox Co., Ohio, writes to the Commissioner in relation to wheat growing the last season, thus: "The difference in favor of drill ing is not so apparent as usual. Protection from the piercing wind on the first of January last, had a more favorable influence on the wheat crop than anything else. Take our country over, and we will scarcely have more than our seed. When I found that my wheat was killed, as the next best thing, I got spring wheat, and at the proper time put it in with a drill running crosswise of the last fall's drill ing, thus leaving the winter wheat to grow with the



spring wheat. I have just finished cutting a No. 1 crop of wheat; I can not yet tell how much per acre, but the crop is a good one in quantity and quality. If the same course had been generally pursued, millions might have been saved to the country." There appears to be a great balance of testimony in favor of drilling in, instead of sowing wheat broadcast, as it gets a better stand in the fall, and is thus enabled to stand the winter better.

Waterloo, January, 1865.

#### CONVENTION OF N. Y. CHEESE MANUFACTURERS.

THE second Annual Meeting of the N. Y. Cheese Manufacturers' Association was held at Utica on Wednesday and Thursday, Jan. 11 and 12. A full report of the Meeting is given in the *Utica Herald*, from which we extract the most important points.

The President of the Association, George Williams, of Whitestown, in his opening address remarked: "It seems reasonably certain that much has been saved to the country at large, by the dissemination of suggestions made at the meeting of last winter, touching the loss of valuable parts of milk, from rough and indifferent management, in connection with a resultant laudable desire among manufacturers to excel in the quantity and quality of their product. The reports will show an increased production from a given quantity of milk this season over former ones, and a still greater improvement in the quality of the cheese. The latter result is apparently fast lifting American factory made cheese to a commanding position in all foreign markets. The exports of our product the past season largely exceeded those of former years; and the history of our commercial relations, with the evident determination to excel in manufacture, indicate an early conquest over the European producers. Indeed, exporters are now quite ready to admit that our deficiency lies not in quality, but in size and form, a matter easily corrected, certainly."

Mr. Mattoon, of Vienna, offered the following resolution:

*Resolved.* That the native cows are the best and most profitable for the dairy.

Mr. Mattoon said he had not had experience to decide positively, but his observation had led him to the conclusion that neither the Devon nor Durham cows were as good milkers as the natives.

Mr. Moore, of New Hartford, said that he had raised calves of all bloods—Devons, Durhams, Ayrshires, Alderneys and grades—for dairy purposes. They were raised together, and had the same feed and treatment. The Devons, he found, matured early, and would give more milk than the Natives for a few seasons, but after five or six years the Natives were much the better. He found the grades between Durhams and Natives and Devons and Na-

tives to be an improvement on the full bloods. The Alderney was the best milker of all, and the Ayrshire was good. In answer to a question, Mr. Moore said that the Alderney required much more care than the Native, which rendered her unprofitable.

Mr. Chapman, of Oneida Lake, had milked full-blood Devons fifteen or sixteen years, and the grades between Devons and Natives; had also had experience with grade Ayrshire cows, crosses between Native cows and full-blood Ayrshire bulls. There had been a great deal lost by farmers putting large framed cattle on poor feed. The full-blood Durhams should not be put on poor pastures; the Devons are the cows for such feed. Where cows are slopped, the Devons were also probably the most profitable. Thought the full-blood Devon not equal to the grades or the Natives. He had a few choice Devons, but found he had to cull much more to get good cows from this breed than from the Natives. The same was true in a greater degree of the Durhams. Some of the full-blood Durhams had not enough milk to raise their calves. The cross from the Devon bull and Native cow was a good one. The peculiarity of the Devons was that they would give a good quantity of milk in the early part of the season, but later it would shrink very much. If put on a new field in August, the extra feed, instead of going into the bag, would go on the ribs. In *quality*—dairy-men would understand him—the Devons excelled all other breeds. The grade from the Devon bull and Native cow was smaller than the full-blood, and the bull determined the character of the teats, and external form or contour, in nine cases out of ten. The grade Devon was about as good as any breed you can get on ordinary feed. Had not made up his mind decidedly, but thought that generally there was nothing better than the grade Devon for dairy purposes. The Ayrshire cross from Ayrshire bull and Native cow, was much smaller than either the Ayrshire or Native.

Leander Wetherell, editor of the *Boston Cultivator*, remarked:

"In considering what cows are best for dairy purposes, the cow should be suited to the farm where it is kept. No breed is suited to all localities, and hence there were various opinions, some preferring the Short Horn, some the Ayrshire, some the Devons, and others the Jerseys or other breeds. Grades from the common Native cow were the best breeds for milk and for oxen. In regard to breeds, he would say, that God makes the species and man the breeds. Cattle are of one species, but breeds are various. The imported Short Horn had been made by means of skill in breeding. There was a difference between the Short Horn and the Devon. An unskillful breeder might select 50 perfect Short Horns from the herd of Mr. Thorne and keep the



breed on a farm by themselves for 15 or 20 years, and by injudicious management the chances are, that at the end of that time they will be a very shabby lot of animals. But the Devon kept in the same way 20 years would turn out a perfect Devon. Here was the difference; the Devon was a fixed type, and so in the Hereford, but not so with the Short Horn.

"The dairy farmers of Hartwick, Barre, and some other places in Massachusetts, had introduced the Short Horn of good milking families, and have used him for raising dairy stock and breeding from best Native cows. Hence they obtained a first rate lot of cows. They have derived more benefit from this cross than from other breeds. They do not get so good results from the Ayrshire or other breeds as the Short Horns.

"There was no breed so profitable for the dairy as the Native cow. An illustration was given of a well known farmer in Massachusetts, who had tried the Hereford, the Ayrshire, and the Alderney, to test the matter and determine which was best, but there was no cow on the farm so profitable as the Native. On a farm in Essex county, where the Trustees of an Agricultural Society had introduced Ayrshires to be tried with Native cows, he (Wetherell) went up to find out which proved to be the best stock. The manager was absent, but in talking with the wife of the manager and the hands employed on the place, they told the whole truth in the matter, and they all affirmed that the common cow was more profitable than the Ayrshire. Another farmer had offered to put three or six Native cows against the like number of imported Ayrshires, and let both breeds fare alike, and the owner of the animals that produced the best results at the end of three years should have both lots. The owner of the Ayrshires did not dare to accept the offer, for farmer Sheldon, of Wilmington, with his Natives, would have taken the blooded stock.

"Mr. Wetherell said he was an advocate of the Short Horn breed of cattle, but they were no hobby with him. He had no interest in the matter. He had spoken freely and given his preferences, &c. The grade Short Horns made good working cattle, and they were of more profit because they could be easily converted into beef. At Middleton, Conn., no breed of oxen in the quarries were liked as well as the Short Horns. When work was done they were put in the stall to fatten.

"With regard to grade animals, Farmer Anderson bred from good Natives, introducing a thorough-bred bull. He had been able to take the first premium all through the Connecticut valley, and he maintains that grades are the most profitable to breed. His heifers at two years old brought him \$150, and that was good enough.

"The Durhams were bred for symmetry and not for milk. The highest milking qualities and the highest symmetry cannot be combined in the same animal."

#### MR. X. A. WILLARD'S ADDRESS.

Mr. Willard, of Herkimer county, well known as a writer on dairy matters, delivered an interesting address, from which we make a few extracts:

"The Associated Dairies of New York now represent an immense capital. It is only a few years since we saw them first inaugurated on the soil of Oneida, attracting attention from their novelty, but looked upon with distrust by the old and experienced dairymen who had no confidence in their successful operation. No effort has been made to force this system upon the public. It has marched forward on its own merits, and now obtains a foothold in the best dairy districts of the world. It has not only spread over New York, but has been carried into the Western States, New England and the Canadas, and the 'goods' manufactured are becoming famous in the markets of Europe. If we look into the causes of this success, we shall find that it rests on no ephemeral foundation, but has a substantial basis that commends itself to the dairy public, that must soon supplant the old order of cheese dairying, and drive it from the land.

"I am not prepared to say that factories exhibit any more skill in manufacture than is found in some of the private dairies, nor is it pretended that any better quality or larger quantity of cheese can be made; but that it is quite equal to the best, more uniform, and brings a higher price, is beyond dispute. These are arguments of great power, which are constantly at work, pushing a factory here and there in the old dairy districts, and thus gradually undermining the family cheese making.

"The questions have been frequently asked, Is the factory system destined to stand the test of years? Is it to continue to prosper, or will it not soon break up, and dairymen return again to the old system of cheese making? In my opinion, No. The system is a progressive step; and all history teaches that when that is taken it is difficult to retrace the step. Doubtless some of you remember when the wool and the flax, grown on the farm, were spun and woven in the family. We shall never return to that again, because we cannot afford it. They can be more cheaply manufactured by associated capital, or where the untiring arm of the machine is substituted for that of the living muscle. The flesh and blood of our wives and daughters are of too much consequence to be worn out by this ceaseless toil, when the spindles and looms, driven by steam or water power, can relieve them of this burthen at a fraction of what it costs in home manufacture. Then should a neighborhood of dairymen &c



the work of cheese-making in families, employing many hands, when it can be performed equally well by a half-dozen persons in a well-constructed factory?

"But it is claimed there is one feature with regard to cheese associations that operates injuriously on the interests of old dairy districts. Cheese dairying is no longer a privileged business, narrowed down to a few places, where high skill in manufacture has built up an enviable reputation. It is opened up to many localities. What you have been acquiring by long years of patient toil, by science and experience, is at once opened to whole communities, where the art of manufacture is unknown. They come here and pick off your best cheese makers—they erect their factories and meet you in the market on an equality. So long as dairying was conducted on the old system, this could only be done slowly, and so gradually as not to influence the trade for years. Doubtless in this respect the factories act unfavorably on those who would prefer to see dairying confined within narrow limits; and the fears that the business may be overdone, are not altogether groundless. But the step has been taken, and it is too late now to look back. It remains for us to make a market sufficiently large to take all our 'goods.' In what manner this can be done is obvious.

"We can compete with the dairymen of the old world as to prices, and when we shall be able to outdo them in quality, a market for our 'goods' is secured for all coming time. The business of cheese dairying is now assuming large proportions, and will still increase rapidly under the stimulus of ready sales, high prices, and the facilities offered for manufacture under the factory system. How far this influx of the business is to influence prices, remains to be seen. Without a market in Europe, the supply, it is evident, will be so great as to glut the home-trade, and render cheese dairying unprofitable. It is true, nature seems to have hedged the dairy within certain limits. The immense plains of the West and South, as well as large portions of the Middle States, are not adapted to dairying. The lands are deficient in springs and streams of living water, the soil is of such a character that grasses soon run out, and pastures become brown and dried up, or afford scanty herbage long before midsummer. These lands are better adapted to wheat and corn, or the production of beef or mutton or wool, and hence will not naturally be employed for the dairy. But still there are large tracts of land suitable for milch cows, and should they be generally devoted to the dairy, we may find the annual supply of cheese so great as to sensibly affect prices. There is no question of more importance, none of more vital interest to the dairyman, than this matter of market—a market that is permanent, enduring, and remunerative.

"In 1860, before prices became inflated, the cost of producing milk in the best dairy districts of Herkimer, was a little above 7c. per gallon. This may seem an extravagant estimate by those who have never thought of the matter, but I will submit the items of each expenditure, and farmers can judge how far they are out of the way. First-class lands have been selected, or such that three acres on an average will produce sufficient food for the summer and winter keep of one cow. A good cow also is taken, or one capable of yielding 500 gallons of milk during the season, which will produce 500 pounds of cheese. With these data we commence:

Interest on land (\$300) at 5 per cent.....	\$15.00
Average annual cost of plaster for three acres, hauling, sowing, etc.....	2.00
Interest on cow (\$40) at 7 per cent.....	2.80
Grain fed in spring, say.....	1.00
Milking, at 1½c. per day.....	4.50
Cost of harvesting and storing 2¼ tons of hay.....	6.00
Annual average depreciation of stock.....	3.00
Annual taxes, State, county and local, say average proportion.....	1.50

Making.....\$35.80  
for 500 gallons of milk, or 7 16-100 cents per gallon.

"In this estimate, nothing has been allowed for care of stock in winter, nothing for fencing or for keeping up the farm, nothing for loss of animals from accident or other causes, and nothing for various other items required in running a dairy farm. All these items, except interest on land, which is put at five per cent., are for cash paid out when labor and materials were cheap. Of course now the cost of producing milk must be much more.

"Those who have an idea that cheese can be made and sold for 7 cents per pound, presume on people's 'working for nothing and boarding themselves,' and then 'throwing in the trimmings.' The flavor of this kind of cheese dairying can not be very sweet or savory, to say the least.

"This question of cost in producing milk should be determined on every dairy farm—the estimates should be carefully made and compared with the sales, and it will then be seen whether the business is profitable, or being conducted at a loss. We are just entering upon an extraordinary phase, in the history of American taxation, and our necessary annual expenditures must, for years to come, be greatly above those of the past. They must be met manfully, and ways devised in producing for these extra calls on our earnings and profits. They cannot be met by poor herds, and a shiftless and improvident mode of farming. The average annual yield of the cows must be brought up to six hundred and more pounds of cheese per head. We must learn the means of keeping more stock on a less number of acres, and at the same time supplying the herds with a greater abundance of food and subjecting them to a less amount of labor in obtaining it."



## FEEDING WHEY TO COWS.

This subject was discussed at considerable length. It seemed to be the general opinion that it was more profitable to give the whey to the cows than to pigs. One speaker said he got five pounds more milk per day from his cows by feeding whey. He adds to the whey when sour (for thirty cows) a bushel of bran. In this way he can keep one-third more cows on the same pasture. During the drouth last summer, it was observed that those farmers who fed whey got double the quantity of milk.

"We have been flattering ourselves the past year on receiving extraordinary prices for cheese, and yet England has bought it at less price than in 1860. The high rates of gold and bills of exchange have stimulated shipments, and it is a question with some, whether our largely increased exportations may not be partly due to this, rather than a healthy foreign demand. But how is it to be with us after the close of the war, or when everything drops down in price to a gold basis? Are we then to realize the old prices of 10c. to 12c. per pound? Will not the immense supply—unless it be of a superior quality—have a tendency to reduce prices? This is a question that should engage our serious attention.

"American cheese has been greatly improved within the last half-dozen years, but the average of our factory cheese is still below the English standard of first-class Cheddar. The celebrated Cheddar cheese of England sells in advance of ours. It has been sold in London markets at wholesale at from 84 to 112 shilling per hundred weight, or from 17 to 24c. per pound in gold, while choice American cheese commanded from 62 to 65 shillings, a little more than half price.

"Now there is no reason why our factories should not be able to meet all the conditions of the English market, and as to flavor and high priced cheese—they have greatly improved the character of American cheese, and by united and persistent effort, this point *can* and *must* be reached. I learn from dealers that the point has been nearly or quite reached by some of our factories the past season, and if the statement be correct, we can see our way more clearly in the future, for we can manufacture and sell our cheese in England for what it costs there in the mere production of milk. According to Morton's Cyclopaedia of Agriculture, the cost of producing a gallon of milk in Gloucestershire is 6½ pence, or 12½ cents, while in Cheshire it is 13 cents. It will be seen then how large a margin is left them to compete with us in the manufacture of cheese."

**SQUASH BUGS, &c.**—Walter Butler writes the *Genesee Farmer* that he has tried many different articles to keep bugs from vines, but never found anything equal to sulphur put on with a dredging box after every shower.

## LETTER FROM SANFORD HOWARD.

FRIEND HARRIS: I see you notice in the January number of the *Genesee Farmer* a remark of mine in regard to root-culture in Canada. Your comments on the paragraph you copy, and your opinion, expressed in another place, in regard to a proper drill for sowing turnips and other roots, deserve attention. I am sure that one reason why our farmers have not gone more into root-culture is the great amount of hand-labor required in sowing and cultivation; but unless they should make up their minds to engage pretty largely in the business, it would not be an object to purchase such machines and implements (or better ones) as are used in England.

I see you have an engraving of "England's Glory." I saw that horse several times, and though his owner was "bold to say" there never had been so good a one of the kind in England before, and *never would be his equal*, he did not strike my fancy as much as some other draft horses I saw—particularly some Clydesdales. We need a better style of farm-horse in this country; but I have not made up my mind as to the best way to obtain it. If we needed as large horses as the Clydesdales, I should be in favor of them. They are not generally as large as the largest class of English draft horses—weighing, say, from 1600 to 2000 pounds—and I have often heard English farmers express favorable opinions toward them, except that they were "rather small." Yet our farmers are not in favor of so large a horse. I have no doubt a cross of the Clydesdale with the common farm mares of this country would make a decided improvement for agricultural purposes; but if we were to adopt a distinct breed, I have never seen one that seemed more likely to answer our purposes than the French *Percharon*—some excellent specimens of which were imported by the Massachusetts Society for Promoting Agriculture last summer.

Yours truly,

SANFORD HOWARD.

Lansing, Mich., January 12, 1865.

**GOOD SHEEP.**—David Humphrey, of Spring Creek, Cass county, Ind., writes us that he bought a pair of Spanish Merino sheep last fall that were discarded from the flocks of Geo. Campbell and Mr. Hammond. The buck sheared when one year old 13 lbs. of clean washed wool, and the ewe 11 lbs. Mr. H. is so well pleased with them that he wishes to buy some more, and he requests any readers of the *Genesee Farmer* who have Spanish Merino sheep that will shear from 13 to 20 lbs. of wool to write him at what price they will let him have some of them.

**AN UNPATENTED BOOT-GREASER.**—The foot of a rabbit. Try it.

A. N.





## WESTERN NEW YORK FRUIT GROWERS' SOCIETY.

THIS Society convened in this city January 24th.

The following is a list of the officers and committees for the ensuing year:

President—P. Barry, Rochester,—re-elected.

Vice-Presidents—C. L. Hoag, Lockport; G. H. Wheeler, Hammondsport; J. J. Thomas, Union Springs.

Secretary—James Vick, Rochester,—re-elected.

Treasurer—W. P. Townsend, Lockport,—re-elected.

Executive Committee—H. E. Hooker, Rochester; T. C. Maxwell, Geneva; W. B. Smith, Syracuse; Jno. Fisher, Batavia; L. F. Allen, Black Rock.

Committee on Native Fruits—J. J. Thomas, Union Springs; Thos. Smith, Geneva; C. L. Hoag, Lockport; C. W. Seelye, Rochester; E. W. Herendeen, Macedon.

Committee on Foreign Fruits—Geo. Ellwanger, Rochester; T. C. Maxwell, Geneva; Joseph Frost, Rochester; W. P. Townsend, Lockport.

The Treasurer's report was read and accepted.

## REPORT OF COMMITTEE TO EXAMINE FRUITS ON EXHIBITION.

The Committee to examine fruit on exhibition report that they find on the tables a splendid collection of 38 varieties of winter pears from Ellwanger & Barry, 15 of which were eating pears, the remainder cooking pears. Several of the eating sorts were well ripened and excellent.

R. J. Donnelly of Rochester, exhibited 10 varieties of apples.

R. Schuyler, of Seneca, exhibited very fine specimens of Baldwin and Greening apples.

P. P. Bradish, of Batavia, had 25 sorts of apples.

Dr. F. M. Perine, of Dansville, exhibited well preserved specimens of Isabella and Catawba grapes.

H. N. Langworthy, of Greece, fine specimens of Rebecca and Diana grapes.

Judge Larowe, of Hammondsport, had two plates of most excellent Catawba grapes.

W. H. Adams, four plates of Isabella grapes, well kept.

Frost & Co., Rochester, two varieties of well grown grapes.

On behalf of the Committee.

E. W. HERENDEEN.

## REPORT OF COMMITTEE ON FOREIGN FRUITS.

Among the many and not well known older varieties of foreign pears which your Committee have fruited for several years in succession, the following have proved acceptable acquisitions, and worthy our recommendation of more general cultivation, viz.:

*Pater Noster*—Tree a vigorous grower; fruit of large size, nearly as large as Van Mons Leon le Clero, half melting, very good quality—December and January.

*Emile de Heyst*—Tree vigorous and productive; fruit medium to large; skin yellowish green when ripe; flesh melting, juicy and good—November.

*Belle Williams*—Tree a beautiful, erect, vigorous grower, and productive, the wood resembling the Bartlett; fruit very large, of fine, pyriform shape skin yellow, overspread in part with russet; flesh melting and good—February to March. The fruit being so large and heavy, it should be planted in sheltered situations, otherwise the wind will blow them off; does well on both pear and quince. As with most varieties, its quality should not be judged the first three or four years after the tree first comes into bearing—it improves with age—thinning out should not be overlooked.

*Souvenir d'Esperin*—Tree a vigorous grower fruit medium size; skin yellow, and russety; flesh melting, buttery and high flavored; a fine late autumn pear—November.

*Abbe Edourds*—Tree vigorous; fruit medium greenish yellow with a russety cheek, melting, sugary and good—last of November.

*Beurre Millet*—Tree of medium vigor and productive; fruit medium size; skin brownish yellow when ripe; very juicy and buttery, and almost as high flavored as a Seckel—December.

*Beurre Sophia*—Tree a vigorous grower; fruit medium size, long, like Canandaigua; skin lemon yellow, russet around the stalk; flesh melting, buttery, full of vinous and sugary juice—last of September and first of October.

*Delices de Jodoigne*—Although this variety was introduced in Belgium twenty years ago, it is very little known in this country. Tree of medium vigor; fruit medium to large; skin yellowish green speckled with russety dots; flesh half melting, sugary, and highly perfumed; quality best; October.

*Jules Bivort*—Tree a vigorous grower; a splendid large pear; skin greenish yellow, with patches of russet, and thickly covered with small green dots; flesh fine grained, melting, sweet as honey, slightly musky; first rate in all respects—middle of November.



*Liberale*—Tree of medium vigor; fruit about as large as Dix; skin yellowish green, sprinkled with russety dots; flesh melting, sweet, rich and aromatic—October.

*Serrurier*—Tree a vigorous grower; fruit medium size; skin yellowish, with a red, mottled cheek; flesh fine grained, sprightly, melting, vinous, first rate—October.

*Capucin*—Fruit medium size; skin greenish yellow, covered on the sunny side with a beautiful mottled red, like the Andrews; flesh yellowish white, melting, vinous, best—October.

*St. Dorothee*—Fruit large: skin green, changing slightly as it ripens—resembles Marie Louise; very sweet, melting and perfumed—October.

GEO. ELLWANGER, Chairman.

#### A PIONEER NURSERYMAN GONE.

The following resolution in reference to the late Electus Boardman was offered and accepted:

*Resolved*, That this Society hereby bears in remembrance the decease of Electus Boardman, which occurred in this city on the 19th inst.

He was emphatically a pioneer in the nursery business in Western New York, commencing more than forty years ago in the town of Brighton, and continued in it until recently. The interests of fruit growing in Western New York, as well as the adjoining States and Canada, is greatly indebted for its early advancement to his great energy and perseverance. Although he seldom participated in the meetings of this Society, he felt a deep interest in the progress of horticulture.

The following Questions were offered for discussion:

1st—The results of the most recent experience with the new varieties of the grape?

2d—The best varieties of hardy grapes to furnish a succession for family use; and how long may grapes be had in perfection?

3d—What peculiarities of soil is adapted to the different varieties of the grape?

4th—The best mode of keeping the grape?

5th—The most recent experience with the new varieties of the pear?

6th—The best varieties of pears for general cultivation?

7th—Does our past experience justify the extensive planting of the pear in Western New York?

8th—What is the cause or causes of the failure of the peach crop in Western New York? And what is the best course to remedy the evil?

9th—Which is the most profitable of the Small Fruits to cultivate for market?

10th—What is the best method of growing and ripening fruits under glass?

Referring to the first question, Judge Larowe said that he had fruited Delaware, Diana, Concord, and Hartford Prolific. His experience with Delaware was rather limited, having grown but three crops of them—the results, however, were very satisfactory. Diana had not done so well with him, having proved a shy bearer, but thought it one of the best

of grapes. Delaware was not a good keeper, but Diana will keep as well as winter apples. Concord he considered a poor grape. Hartford Prolific he thought valuable for its earliness.

Mr. Fisher, of Batavia, desired to hear something of Iona and Israella.

The President read an extract from a letter he had recently received from Mr. Chas. Downing, in which he stated that he held a high opinion of this grape, and that it promised to be one of the best.

Mr. Jackson, of Dansville, said that he had lately been to see Mr. Downing, and conversed with him on the subject of grapes. He (Mr. D.) said that the best native grape of which he had knowledge was the Delaware; but the Iona, if it continued to be as good for a year or two more as it had already proved, would, in his judgment, be the best.

Judge Larowe thought Isabella and Catawba, where they would do well in Western New York, to be the most profitable varieties.

The President said that the Concord is not equal to the Isabella, Catawba, Delaware or Rebecca, but in some localities it is valuable for its earliness, and for people not too particular, pretty good.

Mr. Olmsted had some experience with Delaware, had several acres of them, but they had not yet borne much; he was offered 40 cts. per lb. for them last fall. He thought Rebecca a good grape; had fruited Rogers' No. 15, 9 and 4, but none of them extra; Allens' Hybrid a good grape.

President—Some of Rogers' varieties promise to be worth something, but none of them are equal to Concord. Allen's Hybrid had not done well with them, as it had mildewed. He had just received a letter from a gentleman on the Hudson, well informed in reference to grape culture, who said that No. 1 was the best grape he had.

C. L. Hoag had fruited 1, 2, 4, 15, 19, 23, 33, 34 and 39 for three years. This year all ripened well but 34. Was much pleased with No. 1; it is of the color of Delaware; bunches of about  $\frac{1}{2}$  lb. weight disposed to be somewhat open. No. 39 was the best this season.

Mr. Crane, of Lockport, thought Delaware, for general cultivation in Western New York, was the best variety.

Mr. Moody—Never saw the place where the Delaware would not ripen, but where Diana will ripen thinks it preferable; but generally for Western New York, Delaware is undoubtedly the best. Thought Concord valuable for the West.

Hoag—Do not consider Concord valuable for Western New York. Have never seen Delaware fail to ripen except when it had overborne. Hartford Prolific would bear a good deal of poor treatment.



Dr. Sylvester—Disposed to think well of Creveling.

President—Pleased with Creveling.

Hoag—Fruited it three years; quality very good.

Olmsted—Had fruited Lydia two years, and thought it would be one of the best white grapes.

The second question was disposed of by balloting; the largest number of votes cast was 30, for the Delaware. The following table shows the number of votes for each variety that was recommended:

Delaware.....	30	Diana .....	26
Isabella .....	25	Hartford Prolific.....	23
Rebecca.....	21	Concord .....	14
Creveling .....	12	Catawba .....	9
Perkins .....	2	Iona .....	2
Allen's Hybrid .....	2	To Kalon .....	2
Northern Muscaine....	2	Israella .....	1
Adirondac .....	1	Lydia .....	1

Isabella received three, Catawba three, and Diana two additional votes for cultivation in situations where they would ripen.

Question Three.—Judge Larowe said the richest grapes were grown on the lighter soils—the most pulpy on heavy soils.

Mr. Thomas remarked that Mr. Underhill had said to him that grapes must not have a very fertile soil, but should be cultivated every week through the season.

Mr. Ellwanger said Isabella and Catawba required a heavy soil, otherwise the bunches would be loose. Delaware, Rebecca, Concord and Diana will do well on a lighter soil—say a rich, sandy loam.

Mr. Spence had seen the best vineyard on a light soil with a coarse gravel subsoil, where wheat would not grow one foot high. Ten tons of Isabellas had been grown in this vineyard of 1¼ acres.

Mr. Moody's observation had been that a heavy but dry soil is generally best suited to grapes.

Fourth Question—Keeping of Grapes.—Dr. Perine was asked how he had preserved until the present time the fine specimens he had on exhibition. He stated that he took boxes that would hold from 20 to 25 lbs. into the vineyard on a bright day, and there filled them and closed up the boxes by covers, and carried them away to a cool cellar, where they have remained. He was careful to reject any bunches that were not thoroughly ripened, and not to handle them much. Grapes are as easily bruised by handling as any other fruit, although it may not be perceived, and the bruised spots quickly commence decaying.

Judge Larowe had kept grapes well by packing them in two-gallon earthen jars, with a block at the bottom of the jar to keep the grapes up from the moisture that always accumulated at the bottom more or less. As soon as the jars are filled they are covered and sealed with wax, and set away in a cool place. Another way he practiced was to pack the grapes in slatted boxes, with alternate layers of

rye straw, and then place them where the temperature would be cool and even; in this way he had kept them until April.

Mr. Ellwanger had not heretofore succeeded in keeping grapes in dry rooms or in the cellar. Last vintage he picked grapes and placed them immediately in boxes holding from 12 to 24 lbs., which were then taken to a barn and kept until frost, when the boxes were packed in a large box lined on every side with dry leaves a foot in thickness; they are to-day apparently as fresh as when picked, without any mould. The boxes were kept open in the barn until there was danger of their freezing. In this way he kept Isabella, Catawba and To Kalon. Rebecca, Delaware and Diana were wrapped in thin papers, but otherwise treated the same.

Mr. Spence had heard that some kinds of fruit kept best when not fully ripe. He had heard this of Catawba grape, and was not sure but that this grape kept best by not being fully ripe.

H. N. Langworthy remarked that most kinds of fruit would keep longer and sounder when not fully ripe. He exhibited some Rebeccas which he had picked when not fully ripe. They were sounder than those picked later. The flavor of those which ripened fully was better. To keep grapes long he would not let them fully ripen, but they would not have so good a flavor as those taken fully ripe.

Mr. J. J. Thomas, of Union Springs, said that 30 years ago he had known grapes to be packed in jars of dry maple saw-dust. He did not know that the saw-dust was necessary. There are three points to be attended to in keeping grapes well:—1st. To get them. 2d. To have enough of them, or they will somehow mysteriously disappear before mid-winter. 3d. The moisture of the room where they are kept has much to do with their preservation, and if we can control this condition, it would be one important point gained. By experiments which I have made this winter, I find a great difference of moisture in rooms of the same temperature.

Dr. Sylvester, of Lyons, had kept grapes this winter, putting them in paper boxes on shelves, in a room with a chimney in it which dried the air. The grapes were now in fine condition, but they were somewhat shriveled by the heat. The flavor was good. He had kept grapes heretofore in cool rooms, and had them in good condition. Grapes should be ripe to be kept well, and in good flavor to retain their aroma.

Judge Larowe tasted the grapes of Mr. Langworthy, picked when not ripe, and he thought they were not fit to be eaten, while those which he had left until fully ripe were now delicious. The grape is a fruit that will not ripen after picking. The cheapest way to keep grapes was by packing in straw, after being properly cured on racks.



Mr. Olmstead, of Pavillion, had a simple method for keeping grapes. He had drawers holding 25 pounds each; took them to the vines and filled them with grapes. He then took them in-doors, and in three weeks sorted them over and piled them in a chamber, one drawer over another to exclude the air, and kept them very well, though they were not very plump. He thought grapes would bear a lower temperature than generally supposed. The moisture in the air was the thing to be avoided. He could not keep Delawares longer than January, but thought there would be a way found yet to keep those grapes longer.

Question Fifth—Mr. Ellwanger made a report as Chairman of the Committee on Foreign Fruits, which we have given above. He also gave his opinion as follows in reference to

*Jones' Seedling*—A fine small russet winter pear, good bearer, healthy tree, and excellent fruit. Almost or quite as good as Winter Nelis, and handsomer. Should be more cultivated.

Thomas and Barry concurred.

*Church Pear*—Dr. Sylvester inquired if this was new. They had cultivated a pear in Lyons for many years called Dick Robinson. Declared by Downing identical.

Mr. Barry said the pear was grown here under the name of Virgalouse more than thirty years ago. It was a large tree then—obtained from Prince's nursery.

*Beurre Gris d'hiver nouveau*—Ellwanger said he had opened it beautifully this year, and it is a splendid pear. Had a large crop, and sent some to New York to a commission house to see what they would fetch. Sold for \$20 per bushel.

Mr. Hooker inquired of Society about Edwards pear.

Mr. Barry—It originated in the town of Brighton, and has been confined there. An excellent pear, peculiar walnut flavor ripens up well, in September. All things considered, no pear in its season superior. Fine grower on pear or quince—good bearer.

Thomas—Not so handsome as could desire, but equal or superior to Belle Lucrative in its best estate.

Question Sixth—This question, like the second, was subjected to a test of balloting, with the following result:

#### SUMMER VARIETIES.

Beurre Giffert.....11	Bloodgood.....2
Tyson.....10	Brandywine.....2
Doyenne d' Ete.....9	Dearborn's Seedling....1
Rostiezer.....9	Genesee.....1
Osband's Summer.....8	

#### AUTUMN VARIETIES.

Bartlett.....16	Flemish Beauty.....8
Sheldon.....16	Beurre Bosc.....4
Duchesse d' Angouleme.14	Howel.....3
Louise Bonne de Jersey.13	Washington.....2
Seekel.....13	Buffum.....2
Beurre d' Anjou.....9	Onondaga.....2
Beurre Diel.....8	Des Nonnes.....2

#### WINTER VARIETIES.

Lawrence.....15	Columbia.....2
Winter Nelis.....11	Belle Williams.....1
Easter Beurre.....8	Beurre d' Aremberg....1
Vicar of Winkfield.....5	Bergamot d'hiver.....1
Glout Moreeau.....3	Due de Bordeaux.....1
Beurre Gris d'hiver No-veau.....2	Beurre Bachelier.....1
Josephine de Malines..2	Doyenne d' Alencon....1
	Jamiette.....1

Remarks were then made by members in reference to some of the varieties in the list.

*Doyenne d' Ete* and *Beurre Giffart* were highly shoken of by many, and no objections to them were offered.

*Brandywine*.—Barry—This is a valuable variety, fine and showy.

Salter—Have several fine trees of it, but they do not bear well.

Hoag—It is not productive.

*Tyson*.—Fish—It is one of our best early pears.

Hooker.—One of the best in all respects.

Hoag—It is very exempt from blight.

*Bloodgood*.—Hooker—Rather poor; sweet and indifferent.

Fish—It has proved better with me this year than ever before.

Hoag—I coincide with Mr. Hooker.

Langworthy—I think it should be classed with old, exploded varieties.

Barry—I find it still a valuable summer pear.

*Rostiezer*.—Lay—An excellent pear.

Maxwell—It is a fine pear and good bearer, but subject to blight.

Hoag—It is excellent, but quite liable to blight.

*Washington*.—Thomas—It is a sweet fruit, a good grower, even on poor ground, and bears abundantly; a valuable pear.

Fish—An excellent bearer and fine fruit.

*Buffum*.—Thomas—Thought highly of this pear for profit; although quality not first rate, yet its hardiness and thriftiness and abundant bearing and comparative exemption from blight and other diseases made it a valuable sort.

*Beurre d'Anjou*.—Dr. Sylvester—Think highly of it.

These remarks were approved by several members who were best acquainted with it.

Moody—Fine in Lockport, and we think quite exempt from blight.

*Beurre Diel*.—I would include this variety in a list for general cultivation, as it comes at a time when there are not many good pears; it is very fine moderately productive on young trees and on quince stock, but on standard trees it is apt to overbear.

Olmsted—It is one of the best late autumn pears, and keeps well.

Sharp—I have quite a number of them; it is a strong grower, handsome tree, and abundant bearer; it spots considerably, and on that account would not plant it much.



Barry—The late autumn pears I think are very valuable, as at that time there is not much competition of fruits in the market, and they bring a high price.

*Duchesse d' Angouleme*.—All concurred in an expression of the good qualities and valuableness of this variety.

*Louise Bonne de Jersey*.—Fish—I have wondered why this sort was so popular; it is too sour.

Hooker—I have found *Louise Bonne de Jersey* to stand the blight and other calamities better than any other sort, and have more trees and more fruit of it than of any other kind; I enjoy it highly, better than a sweeter pear.

Thomas—It has so many good qualities that we shall not get rid of *Louise Bonne de Jersey* very soon. Thought very highly of it.

Messrs. Sharp, Ellwanger and Hooker concurred in this opinion.

Hooker—It bore heavily with me this year, and brought \$4 per bushel on the trees.

Barry—My opinion of it may be best understood when I say that I have just planted in my own garden several hundred trees of it.

Hooker—Although the *Seckel*, in comparison with the *Louise Bonne de Jersey*, would be considered the highest flavored, yet I find that where people have the privilege of using both, they consume four times as many of *Louise Bonne de Jersey* as of the *Seckel*.

Salter—The only fault I know of it is its overbearing.

Moody—I think this overbearing one of the finest qualities, for then we can thin out the fruit and distribute it evenly over the tree.

*Flemish Beauty*.—Hooker—It is beginning to crack and have black spots.

Lay—It cracks badly.

Fish—The last two years it has cracked with me.

Smith, of Geneva—It shows some signs of cracking.

Hoag—It cracks some and blights badly.

Gillett—In Yates Co., on heavy clay soil, it has never cracked. I have fruited it five or six years.

Barry—Cracking is owing to a fungus, the same as on the *Virgalieu*, and there is danger that it will follow it up, and I would not therefore recommend it to be planted largely here.

*Seckel*.—Olmsted—Have found the *Seckel* to crack.

Hooker—Have seen several trees this season entirely worthless from this cause.

*Beurre Bosc*.—Moore—I found it a pear of the very highest flavor.

Lay and Olmsted concurred.

Thomas—It deserves all the commendation we have given it, but it is too tender.

Question Seventh.—Remarks upon this question were made by quite a number of members, in which the opinion prevailed that by the selection of proper varieties and cultivating them upon suitable soil, pear culture would prove remunerative. Several instances of success and of failure were given, which our space will not allow us to insert.

Question Eighth.—Thomas—First cause, want of trees. Second, bad treatment. Third, severe winter. Against the last there is no remedy, except perhaps the selection of the most favorable locations, and perhaps some kind of protection. Another cause is curl of the leaf, induced no doubt, in part at least, by poor cultivation.

Moody—Thought the destruction of the peach crop in winter, which is now much more common than formerly, was caused by the cutting away of the forests, thus exposing them to severe winds.

Hooker—Thought something might be done to avoid the curl by the selection of the harder varieties.

Question Ninth.—All agreed that the Strawberry was the most profitable of all the small fruits.

Question Tenth.—Mr. Fisher had devoted some time to growing grapes, peaches and figs under glass, and had met with some success. Thought that those who had time and means could spend a portion of the leisure time of winter in growing peaches and strawberries. The small dwarf trees in pots one foot in diameter, yield from 12 to 18 peaches—beautifully colored, and fine. Have succeeded well with cold grape-house.

Thomas—I visited some peach houses last season; was at Isaac Pullen's, in New Jersey, the first day of June; the first peaches were gone; he had 100 trees, bearing each from three to four dozen, which sold for \$6 per dozen, in New York, readily, being \$18 per tree, and \$1,800 for the whole house. He commences to heat about the first of January, and gets the first crop the latter part of May, and the last crop the latter part of June.

BENZINE TO DESTROY INSECTS.—The *Gardeners' Chronicle* says: "As our houses are always, more or less, infested with vermin, it is satisfactory to know that benzine, an article become sufficiently well known as a detergent, is no less efficacious as an agent in insect-icide. One or two drops are sufficient to asphyxiate the most redoubtable insect pest, be it beetle, cockchafer, spider, slug, caterpillar, or other creeping thing. Even rats and mice will speedily decamp from any place sprinkled with a few drops of the patent benzine. A singular fact connected with this application of benzine, is that the bodies of insects killed by it become so rigid that their wings, legs, &c., will break rather than bend, if touched. Next day, however, when the benzine has evaporated, suppleness is restored."



## GARDEN WORK FOR FEBRUARY.

THE garden work in February is, of course, mainly preparatory. The earth is quietly slumbering under its cold white blanket, recruiting its energies for another season's work, and we will not disturb its repose.

But in the way of preparation for next spring's gardening much may now be done. Visit the *tool-house*, (for I suppose that every farmer or gardener has a tool-house, or a tool-room, or at the least a *side* or *corner* of a room devoted to tools, where every implement has its own nail or peg to hang on, and where it may always be found when not in use;) visit, I say, the place where the tools are kept, and see that they are all in good repair and bright for use. If any need repair, repair them; and if any are rusty, oil them, place them near the stove awhile, and then with a sand-paper scour them bright. One can work a great deal easier with a bright tool than with a rusty one. It is also a good plan to have your tools *sharp*. You can accomplish a great deal more with a sharp hoe or spade than with dull ones. A flat file three-fourths to an inch wide is the best implement wherewith to sharpen garden tools. Have your implements all bright and sharp to commence with, and then keep them so.

*Seeds*.—Look out for your garden seeds in time, and test them all before planting time arrives, or you may find out too late to repair the damage that some of your seeds will not grow. If you defer the purchase of your seeds until you are ready to plant them, you may find that your seedsman's supply of rare varieties is exhausted, and you may fail to obtain some choice kinds which you had set your heart upon. Seeds may be tested by planting in a shallow vessel of moist earth, and keeping them in a window of a warm room. If a considerable portion of the seeds fail under such favorable circumstances, they can not be trusted in the garden, or if sown at all should be sown very thick.

As a guide to those about to select seeds for the season, I give a list of the most approved leading varieties, maturing in their order in the list:

*Asparagus*.—Giant—the only variety.

*Beans*.—Dwarfs, Early Snap Shorts, Early Valentines, Early Mohawk, Early Rachel, are among the earliest; the Butter, although rather late, is the best for string beans, as the pods are thick and remain soft and tender a long time, even after they have become yellow.

*Pole Beans*.—London Horticultural, White Cranberry, Scarlet Running and *Large White Lima*.

*Beets*.—Extra Early Turnip, Early Blood Turnip, Long Smooth Blood.

*Brocoli*.—Early Purple Cape, White Cape.

*Cabbage*.—Early York, Earliest Dwarf, Early Salis-

berry, Early Wakefield, Early Savoy, Early Dutch, Early Winningstadt, Early Oxheart, Large Flat Dutch, Large Late Drumhead, Late Drumhead, Savoy, Large Late Blood Red.

*Carrot*.—Early Horn, Long Orange, Altringham Long White.

*Cauliflower*.—Extra Early Erfurt, Early Paris, Thornburn's Nonpareil, Lenomard's.

*Celery*.—Early White Solid, Giant, White Solid, Turner's Incomparable, Dwarf White, Best Red Solid.

*Corn*.—Extra Early Dwarf Sugar, Early Darling's Sugar, Early Eight-Rowed Sugar, Asylum Sugar, Twelve-Rowed Sugar, *Stowell's Evergreen Sugar*.

*Cress*.—Curled Grass, Broad Leaved, Broad Leaved Winter, and Water Cress in running streams.

*Cucumber*.—Early Russian, Early White Spined, Long Green.

*Egg Plant*.—Early Long Purple, Round Purple Improved New York Purple.

*Endive*.—Green Curled, White Curled.

*Kohl-Rabi or Turnip-Rooted Cabbage*.—Large Early Purple, Large Early White, Large Late Green.

*Lettuce*.—Early White Forcing, Ice Drumhead, Early Curled Silesia, Butter, Victoria Cabbage.

*Musk Melon*.—Fine White Japan, Jenny Lind, Fine Nutmeg, Green Citron, Skillman's Fine Netted, Persian.

*Water Melon*.—Early Mountain Sprout, Goodwin's Imperial, *Ice Cream*, Black Spanish, Orange.

*Nasturtium*.—Okra.

*Onions*.—Early Red, Yellow Danvers, Large Red, Yellow Dutch, White Portugal, Red Top Onions, Potato Onions.

*Parsley*.—Extra Curled.

*Parsnep*.—Guernsey or Cup, Long White.

*Peas*.—Daniel O'Rourke, Tom Thumb, Warner's Emperor. *Second early*.—Bishop's New Long Pod, Bishop's Dwarf, Prolific. *Third*.—Champion of England, Blue Imperial, Harrison's Glory, Late, White Marrowfat, British Queen, Lord Raglan.

*Pepper*.—Sweet Spanish, Sweet Mountain, Large Bell, Long Cayenne.

*Potato*.—Early Sovereign, Early Cottage, Early Dykeman, Early Ash-leaved, Kidney, Mercer, Fluke, Peach Blow.

*Pumpkin*.—Large Cheese, Cashaw.

*Radish*.—Early Scarlet Turnip, Long Scarlet Short-Top, White Summer Turnip, Black Spanish, White Spanish.

*Salsify or Oyster Plant*.—Long White.

*Spinach*.—Round for summer, Prickly for autumn.

*Squash*.—Early Golden Bush, Early Green Striped Bush, Early White Scallop Bush, Summer Crookneck, Honolulu, Boston Marrow, *Hubbard*, Winter Crookneck, Yokohama.

*Tomato*.—Early Red, Early Smooth Red, Large Smooth Red, Fejee Island, Lester's Perfected, Large Yellow.

*Turnip*.—Early White Flat Dutch, Early Yellow Dutch, Red-Top Strap-Leaf, White Strap-Leaf, Yellow Swede.

The above list contains about all the varieties of garden vegetables that have been tested in different localities and found desirable.

Those wishing to experiment with new varieties can find them at most of the leading seed-stores.

A few gardeners may be anxious to start a hot-bed in February, but most, unless market gardeners, would prefer waiting until March. I gave in the *Farmer* for February, last year, a brief description of the way to make a hot-bed, to which article I would refer those who wish to start their bed this month.

P. C. R.



## Ladies' Department.

### MRS. STOWE ON BREAD AND BUTTER.

IN the *Atlantic Monthly* for December there are some strictures on American housewifery, and especially cooking, by Mrs. H. B. Stowe, and her very great advantage of European travel give her opinions an additional value. Nevertheless, we are left in a quandary as to how we may profit by her reproofs. She tells us of our poor bread in a perfectly awful manner, of the chemical properties of bread, &c., &c., but ceases there. She hopes our American mothers will brew yeast as their grandmothers did, but does not tell us the process. Now this is the beginning of all good or evil in bread-making, and its importance can not be magnified. The same in butter. In this she goes so far as to say, "The great art is to churn it while it is sweet." I have looked in vain in all the essays I could find, both English and American that treated on this subject, but none recommend this in butter-making. The manner of thus making butter would be perfectly reckless and wasteful, besides, as I happen to know, producing butter not as sweet and well flavored as when the cream is soured. Now if our intellectual friend knows how all these things are done, which she undoubtedly does, why will not some of our agricultural committees offer her such remuneration for her labors as would induce her to come around in the Empire State and lecture to us on these important subjects—important, indeed, if "millions of pounds of butter are yearly manufactured in this country that is merely a hobgoblin bewitchment of cream into foul and loathsome poisons."

There might be some American housewives that could thus learn, whose opportunities or brains prohibit them from learning in the *Atlantic Monthly*. Probably in Europe they are now better skilled in these matters than when Professor Silliman traveled there, when the mind and appetite often roamed and longed for the good things at home. They have perhaps read some articles since in the *Genesee Farmer* bearing on these subjects. At any rate, I find my English neighbors (French we have none) that are settled around us quite as anxious to learn the right way to make bread and butter as we Americans are.

I doubt whether ever this war, destined to improve us in many ways, will ever so improve our national character that we shall relish the English butter without salt. A Frenchman has no faith that our cooking can be good, because to cook such a dinner as we cook in a few hours ought to take till midnight—entirely overlooking our national character—that we work by steam! and that in lieu of forty servants, oft-times in each other's way, the man or woman who has charge of these things superintends the details, which insures more expertness and directness, and we might suppose more intelligence. Now I fully concede that it takes good mental powers, much forethought and great reflection to be a good housewife and cook. Are American women so deficient in these qualities that they are incapable of equaling the women of other nations in this respect?—M. S. B., *Aurora*, N. Y.

### THE WITCH PEN-WIPER.

PROCURE a brown wax doll, with an old woman's face, if possible; fix something on the back to have the appearance of stooping, and fold some cloth round the legs to serve for petticoats, and also for the purpose of wiping the pen. Put on an old-fashioned cotton skirt, and for the cloak cut out a piece of red cloth



rather longer than the breadth, and a shoulder piece of the same material, and gather the cloak on to this; then cut out a cape long enough to cover the shoulders; sew this round the neck of the latter piece, bind it neatly, and also the cloak; tie round the neck a small red ribbon, first having cut out two holes for the arms.—Quill up some narrow lace for a cap, and make a large bonnet of black

satın, with a high, old-fashioned crown, then put in the cap, rather near the edge of the bonnet, sewing it on to the head of the doll. Get a small basket, line it with pink glazed calico, and fill it up with small pin cushions, &c., and hang it on the arm of the old woman. In the hand place a small twig for a stick. When completed, it will make a pretty and useful ornament for a writing-table; or, if very neatly executed, they form pretty embellishments for the chimney piece or side-table.—*Godey's Lady's Book*.

**BAKED BEANS.**—Few people know the luxury of baked beans, simply because few cooks properly prepare them. Beans, generally, are not cooked half long enough. This is our method: Two quarts of middling sized white beans, two pounds of salt pork, and one spoonful of molasses. Pick the beans over carefully, wash, and add a gallon of boiling hot soft water; let them soak in it over night; in the morning put them in fresh water and boil gently till the skin is very tender and about to break, adding a teaspoonful of saleratus. Take them up dry and put them in your dish, stir in the molasses, gash the pork and put it down in the dish so as to have the beans cover all but the upper surface; turn in boiling water till the top is just covered; bake with a steady fire four or five hours. Watch them, and add more water from time to time as it dries away. [The foregoing is a first-rate receipt. Those who don't like the idea of the molasses may omit it, though it adds to the perfection of the dish.]—*German-town Telegraph*.

**A NEW WAY OF COOKING.**—M. Rabinet, of the French Institute, is said to have discovered the means of cooking without fire. He has just laid before the French Academy the result of his experiments. His receipt is: Place your food in a black pot, covered with sundry panes of glass, and stand in the sun. The water soon boils, and the food is said to be of better flavor than if cooked in the ordinary way.





OUR picture this month is one which we think all the children will like. One little chicken, with her night-cap on, looks very like some little girl roused out of a nap to hear the organ and see the monkeys; and we think that the big beetle acts the part of the monkey very well in handing the plate for pennies. We have no doubt, too, that he would fly up to the window more easily than the nimblest monkey could climb. Off in the distance are two peacocks who are too proud to come and listen to the hand-organ. People lose a good deal of pleasure by being proud.

WHAT is the difference between a person transfixed with amazement and a leopard's tail? The one is rooted to the spot, the other spotted to the root.

WHY do hens always lay in the day time? Because at night they become roost-ers.

#### GRAMMAR IN RHYME.

1. Three little words you often see,  
Are Articles, *a*, *an* and *the*.
2. A Noun's the name of any thing,  
As *school* or *garden*, *hoop* or *swing*.
3. Adjectives the kind of Noun,  
As *great*, *small*, *pretty*, *white* or *brown*.
4. Instead of Nouns the Pronouns stand—  
*Her* head, *his* face, *your* arm, *my* hand.
5. Verbs tell of something to be done—  
To *read*, *count*, *sing*, *laugh*, *jump* or *run*.
6. How things are done the Adverbs tell,  
As *slowly*, *quickly*, *ill* or *well*.
7. Conjunctions join the words together—  
As *men and* women, *wind or* weather.
8. The Proposition stands before  
A Noun, as *in* or *through* a door.
9. The Interjection shows surprise,  
As *oh!* how pretty—*ah!* how wise.

The whole are called Nine Parts of Speech  
Which reading, writing, speaking teach.



## Miscellaneous.

### TRY AGAIN.

BY ELIZA COOK.

Once Bruce of Scotland flung him down  
In a lonely mood to think;  
'Tis true he was a monarch and wore a crown,  
But his heart was beginning to sink.

For he had been trying to do a great deed,  
To make his people glad;  
He had tried and tried, but he could n't succeed,  
And his heart was sore and sad.

He flung himself down in sore despair,  
As grieved as a man could be;  
And as hour after hour he pondered there,  
"I must give up at last," said he.

Now just at the moment a spider dropped  
With his silken cobweb clue;  
And the king, in the midst of his thinking, stopped  
To see what the spider would do.

It soon began to cling and climb  
Straight up with strong endeavor,  
But down it came, time after time,  
As near to the ground as ever.

But, nothing discouraged, again it went  
And traveled a half-yard higher;  
'T was a delicate thread it had to tread,  
And a road where its feet would tire.

Again it fell and swung below,  
But again it quickly mounted;  
Till up and down, now fast, now slow,  
Nine brave attempts were counted.

"Sure," cried the king, "the foolish thing  
Will strive no more to climb,  
When it toils so hard to reach and cling,  
And tumbles every time."

But steadily upward, inch by inch,  
Higher and higher it passed,  
Till a bold little run, at the very last pinch,  
Put it into its web at last.

"Bravo! bravo!" the king cried out,  
"All honor to those who try!  
The spider up there defied despair—  
He conquered; why should n't I?"

And Bruce of Scotland braced his mind,  
And, as gossips tell the tale,  
He tried once more, as he'd tried before,  
And that time he did not fail.

JERROLD and a company of literary friends were out in the country. In the course of their walk they stopped to notice the gambols of an ass's foal. A very sentimental poet present vowed that he should like to send the little thing as a present to his mother. "Do," Jerrold replied, "and tie a piece of paper round its neck, bearing this inscription: 'When this you see, remember me.'"

DR. MACKNIGHT, who was a better commentator than preacher, having been caught in a shower of rain, entered the vestry soaked with wet. As the time drew on for divine service he became much distressed, and ejaculated over and over, "Oh, I wish that I was dry! Do you think I'm dry? Do you think I'm dry enough now?" To this his jocose colleague, Dr. Henry, the historian, returned: "Bide a wee, doctor, and ye'll be dry enough when you get into the pulpit."

"You have only yourself to please," said a married friend to an old bachelor. "True," replied he, "but you can not tell what a difficult task I find it,"

### CONJUGAL THERMOMETER.

THE *Nain Jaune* (Paris) relates the following anecdote: "At the commencement of the winter two journalists were in conversation at the opera. The one, M. de X., is a bachelor; the other, M. de Y., just married. 'Well,' said the one to the other, 'how do you get along in your new condition?' 'Ah, my dear X., there is nothing like being married! You can not imagine how happy I am. When I am at work my wife is at my side, and at the conclusion of each paragraph I embrace her. That is charming!' 'Now I understand,' was the happy retort of X., 'why your sentences are so short.' This conversation quickly spread through Paris. From that time forth the articles of Y. were consulted by the public as the thermometer of his conjugal felicity. During two months the prose of M. Y. was disjointed and epigrammatic, in shorter periods than are to be found in the earlier writings of Emile de Girardin. All the women grew jealous of Madame Y. But gradually the periods elongated, and at last Madame V. opened the journal edited by M. Y., and casting a rapid glance over the article signed with his name, cried, 'What! but a single paragraph in the whole article! Poor woman! a divorce will most assuredly follow!'"

IN the course of an examination for the degree of B. A. under an examiner whose name was Payne, one of the questions was, "Give a definition of happiness;" to which the candidate returned the following laconic answer: "An exemption from Payne."

A VERY considerate hotel-keeper, advertising his "Burton XXXX," concludes the advertisement: "N. B. Parties drinking more than four glasses of this potent beverage at one sitting, carefully sent home gratis on a wheel-barrow, if required."

A REGULAR physician being sent for by a quack, expressed his surprise at being called in on an occasion apparently trifling. "Not so trifling, neither," replied the quack; for, to tell you the truth, I have, by mistake, taken some of my own pills."

AN ODD MISTAKE.—A lady asked a pupil at a public school, "What was the sins of the Pharisees?" "Eating camels, marm," quickly replied the child. She had read that the Pharisees "strained at gnats and swallowed camels."

ONE day, at a farm-house, a wag saw an old gobbler trying to eat the strings of some night-caps that lay on the grass to bleach. "That," said he, "is what I call an attempt to introduce cotton into turkey."

"GARDENING FOR LADIES" is all very well, but the dears are more inclined to agriculture than horticulture on account of a partiality for husbandry.

WHY are widows like smokers? Because they often find solace in their weeds.

WHY is a cow's tail like a swan's bosom? Because it grows down.





### The Markets.

At this time last year, gold was 157. It is now 212. At the same time in 1863 it was 150. We have prepared from the *Genesee Farmer* the following table, showing the prices of farm produce in New York at this time (January 31) in the years 1863, 1864 and 1865. It is only by such comparisons that we can form a correct idea in regard to the state of the markets:

	1863.	1864.	1865.
White Wheat.....	\$1 60@1 75	\$1 70@1 90	\$2 50@2 75
Red Wheat.....	1 35@1 60	1 50@1 75	2 10@2 40
Corn.....	85@1 00	1 25@1 50	1 85@2 10
Rye.....	95@1 05	1 25@1 50	1 65@1 90
Barley.....	1 40@1 55	1 25@1 50	1 65@1 90
Oats.....	75@1 00	90@1 10	1 05@1 30
Beans, medium.....	2 25@2 50	2 50@2 90	2 75@3 25
Butter, State.....	20@30	25@30	45@60
Cheese.....	10@14	13@16	28@35
Eggs, fresh, per doz.....	20@25	30@35	45@50
Turkeys.....	9@13	12@14	20@25
Chickens.....	8@11	9@12	16@22
Ducks.....	11@15	10@13	16@22
Geese.....	6@10	7@10	14@17
Potatoes.....	1 50@2 50	1 60@2 50	3 00@4 00
Apples.....	1 75@2 00	2 00@3 00	6 00@7 50
Clover Seed, per lb.....	11@11 1/2	13@13 1/2	26 1/4@26 1/4
Timothy Seed.....	2 25@3 00	3 00@3 25	6 75@7 00
Flax Seed.....	2 80@3 00	3 25@3 50	8 75@9 00
Beef.....	8@10	10@13 1/2	11@11 1/2
Sheep, live weight.....	6@12	9@10	16 1/2@17 1/2
Hogs, dead weight.....	6@7	9@10	16 1/2@17 1/2
Hops.....	17@25	22@33	20@50
Wool.....	55@66	72@85	85@110
Hay.....	18 00@22 00	31 00@32 00	30 00@32 00

It will be seen that every thing except hay has advanced greatly since last year. The advance on most articles is far greater than the advance in gold.

It is worthy of mention that while wool advanced materially from 1863 to 1864, sheep declined very materially. Sheep are now much higher than in 1863.

The advance in beef, hogs and poultry is enormous. Mutton is comparatively low.

Beans are somewhat higher than last year, but the advance is far less than on other produce.

### The Rural Annual and Horticultural Directory for 1865.

Owing to the difficulty of procuring paper, the printing of the *Rural Annual* has been delayed for two or three weeks. It is now ready, and all orders will be answered by return mail. We think this number of the *Rural Annual* is the best yet issued, and we particularly desire that every reader of the *Genesee Farmer* should have a copy. It is sent prepaid by mail for 25 cents, or in clubs of five and upwards in connection with the *Farmer* at 20 cents each.

### Notes on the Weather for the last half of December, and some Results for the Year '64.

As the temperature of the first half of December was above the average, and the last half below, the mean of the month slightly exceeds the general average, or they are as 28.72° to 28.65. The mean heat of the last half was 27.73°. The snow-storm of the 21st and 22d gave us sleighing for a week, when the snow was too much melted.

The water fallen in the month was 2.67 inches. The barometer was low, being 29.31 inches for the month; and the temperature of the year 47.73°.

For the twenty-eight years the average temperature is 47.02°, and for twenty-seven years 47.00°.

For the twenty-eight years the average barometer is 29.53 inches.

For the twenty-eight years the average water is 32.47°.

The range of water, in the twenty-eight years, 34.35 to 42.59 inches.

The range of annual heat, in the twenty-eight years, 44.7° to 48.3°.

With much of plenty from agriculture, there has been a good degree of health, and, in the midst of war, much of prosperity.

### A Splendid Premium.

In addition to the premiums offered on the last page of the *Farmer*, we take pleasure in offering the following splendid premium:

To any person who will send us 150 subscribers at our lowest club rates of 80 cents each, (or 100 at \$1.00 each,) we will send one of Grover & Baker's FIFTY-FIVE DOLLAR SEWING MACHINES, either the new shuttle machine or the original Grover & Baker machine, as may be selected.

Do not wait to complete the list. Send on the names as fast as obtained, simply adding that you have not completed the list.

If you do not succeed in getting the requisite number, you can have other premiums to the amount sent.

### To New Subscribers.

We have received an unusual number of new subscribers to the present volume of the *Genesee Farmer*. We would ask a favor at their hands: If pleased with the paper, will you show a copy to your neighbors and ask them to take it. It would not be a difficult matter to raise a club of five at 80 cents each, or at \$1.00 each for the *Farmer* and *Rural Annual* together.

### A Word to Every Subscriber.

If you are pleased with the *Genesee Farmer*, will you not show a copy of the paper to your friends and neighbors, and ask them to subscribe? We want ten thousand additional subscribers the present month; and recollect that *every one* counts.

### Four Copies for Three Dollars.

ANY subscriber who has sent one dollar for the *Farmer*, can have four more copies for three dollars, and a copy of the *Rural Annual* for getting up the club.



**Bound Volumes of the Genesee Farmer.**

THE *Genesee Farmer* for 1864 is now bound, and will be sent prepaid by mail to any address for \$1.25.

The last six volumes of the *Farmer* (1859, '60, '61, '62, '63 and '64,) handsomely bound, with complete index, &c., will be sent by express to any address on receipt of FIVE DOLLARS! They could not now be printed for the money.

WE desire to thank our agents and friends for their efforts to increase the circulation of the *Genesee Farmer*. We shall endeavor to make the paper more interesting and useful than ever before, so that they need not feel ashamed of having said a good word for it to their neighbors. There is yet abundance of time to add additional names to clubs or to form new ones.

A CORRESPONDENT at Lincoln, Me., writes that he formerly took a weekly agricultural paper, but now by taking the monthly *Genesee Farmer* he is also able to take a weekly newspaper (at club rates), and obtains the two at less cost than the advance price of the agricultural weekly alone.

“Crowded Out.”

SEVERAL communications and a number of “inquiries and answers,” some of them already in type, are necessarily deferred until next month.

**Special Notices.****Coe's Superphosphate of Lime.**

[Letter from Mr. CHARLES BENOIT, farmer for Messrs. LOWE & CHAMBERLAIN at Dunham, Canada East.]

DECEMBER 30, 1864.

GENTLEMEN: The barrel of Superphosphate you sent me for the farm in the spring of 1863, was used by way of experiment on various crops. An acre of ground which had been in grass for many years and nearly run out, was plowed up that spring, and was sown with buckwheat without manure. I took three pecks of the Phosphate and sowed over one-half of the acre. From the time the buckwheat came up, until it was ripe, the difference in appearance was remarkable; the color was dark green; it grew very thick and about four feet tall; while the other half acre was not half so thick or tall, and was in all respects inferior. At the harvesting it yielded  $17\frac{3}{4}$  bushels of grain; the other half 12 bushels, being nearly fifty per cent in favor of the Phosphate.

In the spring of the present year I sowed oats and peas on the same ground without any manure, and the effects of last year's application of Phosphate were as great upon this year's crop as upon that of last year, the growth being fully double that of the other half acre. The extra fodder will alone pay for the cost of the Phosphate. I have not yet threshed the oats and peas, but I am confident the difference in their yield will be equal to that of the buckwheat last year. So you see that as the extra fodder of this year will pay for the Phosphate, the extra yield of buckwheat, and of the peas and oats, are a clear gain of (I think) four times its cost.

I hope you will send a good supply for the farm for next spring, and I intend to get at least two barrels on my own account.

Your obedient servant, CHARLES BENOIT.

Messrs. LOWE & CHAMBERLAIN, Montreal, Proprietors of the Montreal Gazette.

For sale by ANDREW COE, Proprietor, at Montreal, and by merchants in all the counties in Canada.

**ADVERTISEMENTS.**

A FEW short advertisements of interest to farmers—and only such—will be inserted in the GENESEE FARMER at twenty-five cents a line, or \$2.50 per square, or \$25 per column, each insertion, payable in advance.

**THE GENESEE FARMER:**

A MONTHLY JOURNAL OF AGRICULTURE AND HORTICULTURE.

Published at Rochester, N. Y., by

JOSEPH HARRIS.

Terms—INVARIABLY IN ADVANCE—One Dollar a year.

**Silver Medal Wine.****VINES OF THE OPORTO**

OF LARGE SIZE will be ready for planting April 1. Those who failed to get a supply last spring will please apply early. For terms to Agents and Clubs, and Descriptive Circulars address [f2t] E. WARE SYLVESTER, Lyons, N. Y.

**BEECHER'S PATENT VENEER FRUIT BASKET.**

AFTER one season's thorough trial of the VENEER FRUIT BASKET, we offer it to the trade with the full assurance that nothing of the basket line now in market can compete with it in its adaptability to the wants of fruit-growers. For durability and style our Basket has no superior, and for strength and cheapness no equal.

For circulars of description, &c., address

Feb4t

A. BEECHER & SONS, Westville, Conn.

**WOOD-SAWING MACHINES.**

I WOULD call the attention of the farmers to my new DRAG SAW, which, by a simple contrivance (patented April 21, 1863,) draws up the log without stopping, enabling the operator to do a greater amount of work, and with less labor, than by the ordinary machine. I also build small Light Power, suitable for sawing wood, cutting feed, &c., &c. Also, Circular Saws, &c. Address J. W. MOUNT, Medina Iron Works, Medina, Orleans county, N. Y.

1t\*

**\$125 a Month,**

WANTED.—SEWING MACHINE AGENTS! Everywhere, to introduce the new *Shaw & Clark Sixteen Dollar Family Sewing Machine*, the only low price machine in the country which is licensed by Grover & Baker, Wheeler & Wilson, Howe, Singer & Co., and Bachelder. Salary and expenses, or large commissions allowed. All other Machines now sold for less than forty dollars each are *infringements*, and the seller and user *liable*. Illustrated circulars sent *free*. Address, SHAW & CLARK, Biddeford, Maine. dec3t

A PICTORIAL DOUBLE NUMBER.—THE PHRENOLOGICAL JOURNAL and LIFE ILLUSTRATED, for January, appears with 32 quarto pages, and a beautiful illustrated Cover. It contains Portraits of Tennyson, Silliman, Sheridan, Cobb, Phillips, Susanna Wesley—mother of John—an Indian Chief, Franz Muller, Miss Muggins, Miss Fury, the Princess of Wales, Florence Nightingale, A Group of Warriors—Hannibal, Julius Caesar, Pizarro, Cromwell, Charles XII, Frederick the Great, Scott, Wellington and Napoleon, with ETHNOLOGY, PHRENOLOGY, PHYSIOGNOMY, PHYSIOLOGY, and PSYCHOLOGY. No. 1. Vol. 41st. Published at 20 cents a number, or \$2.00 a year, by Messrs. FOWLER & WELLS, 339, Broadway, N. Y. j2t

THE HUMAN FACE DIVINE.” A New System of Physiognomy—Eyes, Ears, Nose, Lips, Mouth, Head, Hair, Hands, Feet, Skin, with all “SIGNS OF CHARACTER,” and How to Read Them, given in the

PHRENOLOGICAL JOURNAL and LIFE ILLUSTRATED for 1865. S. R. WELLS, EDITOR. Portraits of Remarkable Men, in every calling, illustrating different Phases of Human Character, the sane and the insane, the virtuous and the vicious—PHYSIOGNOMY, ETHNOLOGY, PHRENOLOGY, PSYCHOLOGY, &c., in each number. New Volume, 41st, for 1865. Monthly. Only \$2 a year. “Now is the time to subscribe.” Sample numbers by first post, 20 cents. Please address Messrs. FOWLER & WELLS, 339 Broadway, New York. dec4t

**TO FARMERS!**

BRADLEY'S TOBACCO FERTILIZER, AND BRADLEY'S X L Superphosphate of Lime, are for sale at wholesale and retail by the Manufacturer. WM. L. BRADLEY:

Sales Office 24 Broad street, Boston.

Pamphlets containing testimonials in favor of his Tobacco Fertilizer, Bradley's X L Manual on the Culture and Curing of Tobacco, with Illustrations, can be had by addressing the undersigned. WM. L. BRADLEY.

Highest Cash prices paid for Bones. my



## CHOICE SEED.

WITH the return of another season, I would invite the attention of the public to my ANNUAL CATALOGUE OF GARDEN SEEDS, including over two hundred varieties, many of which are of my own raising. I would call particular attention to the following list of new, rare, or very desirable vegetables:

Cannon Ball Cabbage (new, early, and the hardiest of all cabbage; the heads round and about as hard as a cannon ball!) Marblehead Mammoth Drumhead Cabbage (the largest cabbage in the world;) Stone Mason Cabbage (the best of all winter cabbage; the heads hard and very reliable;) Leorwand's Mammoth Cauliflower (the largest of all;) Mammoth French Squash (weighs from 100 to 260 lbs.) Mammoth Sweet Corn (the largest sort known; selected from ears weighing from two to three pounds; very sweet; excellent for the table;) Yokohama Squash (new, from Japan;) American Turban Squash, (new, the dryest, sweetest, and best of all fall squashes—first-rate;) Striped Guadalupe Egg Plant (quite ornamental;) New York extra large purple Egg Plant (the largest of all varieties.)

Ornamental Kale (several varieties in one package, fine for either the flower or kitchen garden;) Pierce's American Cauliflower (the standard late sort in Boston market;) Early Paris Cauliflower (imported seed—the best early sort;) Early White Japan Melon (new, very sweet, fine;) Ward's Nectar Melon (the sweetest, spiciest, best of all the green-fleshed varieties;) Caterpillar Plant (a curious vegetable; several varieties in one package;) Vegetable Snails (another natural curiosity.) Each of the above at 25 cents a package.

Forty Days Corn (extra early—about ten days earlier than Darling's Early;) Mexican Sweet Corn (the sweetest of all varieties of table corn;) Golden Sweet Corn (an early, prolific, sweet table corn, of a bright golden color, fine;) Hubbard Squash Seed (true; I introduced this;) Cow or Tree Cabbage (for stock;) Yard-Long Beans; Extra Early York Tomato (very early, very prolific, of good size and excellent quality;) Cook's Favorite (very early apple tomato; prolific; of excellent quality;) Yellow Lupins (the plant so highly recommended for subsoiling in a recent Patent Office Report; highly ornamental;) Tom Thumb Pea (very early; grows 10 inches high; very productive;) Drew's New Dwarf Pea (new, early, very dwarf, very prolific, excellent pea, egg-shaped; each plant forms a bush; but one pea being required to about one foot of row;) Brown's New Dwarf Early Marrowfat Pea (a new variety which may be relied on as both the earliest and most dwarf Marrowfat grown; very prolific;) Improved Long Green Cucumber; six finest sorts of Cabbage Lettuce in one package; True Boston Curled Lettuce (the most elegant of all lettuces; quality good;) Ornamental Gourds (many varieties in one package;) Spotted Lima Bean; Concord Bean (a new pole bean, remarkably early; quality first-rate;) Extra Flat Beet, (new, very early, about as flat as a turnip; quality excellent;) Chick Peas (two sorts mixed; extensively used in Europe as a substitute for coffee;) Chinese Sugar Cane (pure; seed imported;) New Jersey Hybrid Cucumber (one of the largest and best varieties cultivated;) Lester's Perfected Tomato (very large and thick-meated;) Sutton's Student's Parsnep (new; recently originated in England; desirable;) Chinese Rose Winter Radish (decidedly the best of all the winter sorts; an acquisition;) Hood's Dwarf Imperial Purple Celery (new; superior;) Indian Chief Bean (a pole bean; can be used as a string bean much later than any other variety; very productive.)

Seed of the above at 15 cents per package.

Catalogues sent gratis to all. Those who purchased seed last season will receive it this without writing for it.

feb3t

JAMES J. H. GREGORY, Marblehead, Mass.

## Columbus Nursery, Columbus, Ohio.

HANFORD & BRO. offer for the Spring of 1865 a large and well-assorted stock of

### FRUIT AND ORNAMENTAL TREES,

EVERGREENS, ROSES, ORNAMENTAL SHRUBS, FINE GRAPES, SMALL FRUITS, &c., &c., to which they invite the attention of Nurserymen, Dealers and Planters who wish Trees, &c., of first-rate quality. Address,

HANFORD & BRO., Columbus, Ohio.

RED CEDARS, 4 to 12 inches, \$6 per 1000.

HONEY LOCUST, fine one year plants, \$10 per 1000.

PRIVET LOCUST, 1½ to 2 feet.

RED DUTCH, RED GRAPE and BLACK NAPLES CURRANTS, strong plants, at low rates.

HALE'S EARLY PEACH, the best very early Peach.

Also, a full assortment of Leading Market Varieties.

A large stock of NORWAY SPRUCE, 1½ to 3 feet, very fine.

feb2t

HANFORD & BRO., Columbus, Ohio.

TRUE'S POTATO PLANTER—A one-horse machine, doing all the work of planting potatoes at one operation. Saves the labor of twelve men. Manufactured by

J. L. TRUE, Garland, Maine, Patentee and Proprietor.

Send for a Circular.

feb3t

## Sheep Wash Tobacco

I hereby certify, that I have been familiar with all the processes employed by the South Down Company in the manufacture of their "Sheep Wash Tobacco," and that the article prepared under Mr. Jaques' Patent contains all the useful principles of the Tobacco in a concentrated form.

This Paste, employed as a Sheep Wash, according to the directions furnished by the Company, has the effect of curing Scab and other cutaneous diseases, and destroying all parasitic insects which infest the skin and wool of the Sheep, and thereby improves the health of the animal, as well as the quality of its fleece. Employed in the same way, the solution being made stronger, it will destroy those insects which infest the skins of larger animals, and also those that are injurious to vegetation.

CHARLES T. JACKSON, M. D.,

Assayer to the State of Massachusetts, and  
Consulting Chemist.

Wool Growers should beware of any preparation that contains "sulphur," as it is sure to destroy the fibre of the wool. One pound of *Extract Tobacco* will make twelve gallons Wash, and contains the strength of eight pounds of Tobacco, as prepared by farmers.

Agents wanted in every Wool District.

JAMES F. LEVIN, Agent South Down Co.,

23 Central Wharf, Boston.

\*\* Farmers, preserve this advertisement, and ask your storekeepers to keep the Wash for sale. A liberal discount to the retailers.

feb9t

## THORBURN'S

## CELEBRATED GARDEN SEEDS.

### OUR DESCRIPTIVE CATALOGUE

of every Standard and improved variety of

### VEGETABLE AND AGRICULTURAL

## SEEDS

FOR

1865,

WITH DIRECTIONS FOR THEIR CULTIVATION,

has just been published, and will be mailed free on application to

J. M. THORBURN & CO.,

15 JOHN STREET, NEW YORK.

Trade Catalogue for dealers only is also ready.

1t

## Agricultural and Horticultural Books

FOR SALE BY

WILLIAM WOOD & CO.,

Publishers, Booksellers and Importers,

NO. 61 WALKER STREET, NEW YORK.

C. M. SAXTON having given up the book business, we have the balance of his stock, and have added to it a large variety of other works, making in all the largest assortment of works on Agricultural subjects to be found in this country.

We have just published the NINTH EDITION of MYSTERIES OF BEE-KEEPING EXPLAINED: by M. QUINBY, Practical Bee-keeper, in one handsome 12mo. volume, full gilt back. Price \$1.75 by mail, free of postage. A PRACTICAL AND RELIABLE WORK.

Send for our Catalogue. Books sent free of postage anywhere in the U. S. on receipt of the prices affixed.

Shall be happy to answer all inquiries accompanied by a stamp to pay return postage.

feb&ap

\$80 PER MONTH.—AGENTS WANTED in every town. It is something new and of real value. For particulars, address, with stamp,

feb1t\*

J. S. PARDEE, Binghampton, N. Y.



## GROVER & BAKER'S HIGHEST PREMIUM



## ELASTIC STITCH AND LOCK STITCH SEWING MACHINES,

feb 495 Broadway, New York. tf

## SUPERPHOSPHATE OF LIME, BONE DUST AND MEAT AND BONE COMPOST.

MANUFACTURED BY

**TASKER & CLARK,**

Cor. 8th and Washington Sts., Philadelphia.

THE manufacturers offer their Superphosphate to the public confident that it will be found equal to any similar article now in the market. Being made from finely ground bones (not burned), Peruvian guano, and other ingredients having manurial properties, it has been found a superior fertilizer for wheat, grass, &c., &c. Price \$65.00 per tun at the factory.

**MEAT AND BONE COMPOST.**—A valuable manure from refuse meat, bones and other offal from the slaughter-house. Price \$40 per tun.

**BONE DUST.**—Very fine and pure at \$65.00 per tun.

Terms Cash. Address as above,  
feb7t TASKER & CLARK, Philadelphia, Pa.

## NEW ILLUSTRATED CATALOGUE.

### ROCHESTER CENTRAL NURSERIES.

SEND FOR A CATALOGUE

AND

**SPECIAL TERMS OF SALE,**

AND

**ORDER YOUR TREES DIRECT.**

Address C. W. SEELYE,  
apth Rochester Central Nurseries, Rochester, N. Y.

### AMMONIATED PACIFIC GUANO.

A REAL GUANO, containing from seventy to eighty per cent. of Phosphate of Lime, to which has been added by a chemical process a large per centage of Ammonia, so fixed that it can not evaporate, making it equal, if not superior, to any other fertilizer.

Price, \$80 per nett tun. A liberal discount to the trade.

Pamphlets, with copies of analysis by Dr. Jackson, Massachusetts State Assayer, and Dr. Liebig, of Baltimore, and testimonials from Scientific Agriculturists, showing its value, can be obtained from  
J. O. BAKER & CO., Selling Agents,  
oct6t 131 Pearl street, New York.

**CRANBERRY PLANTS.**—Of the Bell, Cherry and Bugle varieties. Send for Circular giving mode of culture, price, &c. Also, manufacturer of **Grafting Wax and Tree Varnish** for cuts and bruises on trees. A sure protection from Weather, and will heal sound wood. The Wax is also valuable for sealing Fruit Bottles. For sale by  
oct6t F. TROWBRIDGE, Milford, Conn.

## THE "PEOPLE'S" IMPROVED Farm Mill

Price of Mill Complete, Fifty Dollars.

MANUFACTURED BY

**R. L. HOWARD,**  
BUFFALO, N. Y.

The attention of all interested in the subject of stock feed is respectfully called to the

### IMPROVED "PEOPLE'S" FARM MILL.

The recent improvements made in this Mill make it the most desirable Mill for general use.

The peculiar operation of the Plates make this Mill self-sharpening.

Four movable and six stationary plates constitute the grinding surface, either of which can be replaced at an expense not to exceed 75 cents, so that this Mill can be renewed at an expense of \$7.50.

The movable plates are operated by a double crank, with the power applied on them within one inch of the center of the shaft, giving them an Oscillating, Reciprocating and Longitudinal motion. Requires only

**250 Revolutions per Minute,**

and can be operated with any good two horse power.

It will grind corn at the rate of

**SIX TO EIGHT BUSHELS PER HOUR,**

in the best manner for Stock Feed, at least one-half being the best kind of Family Meal.

This Mill has been well tested, and the best of references can be given for their good working qualities.

They are simple and durable, take up but little room, weigh less than 300 pounds, and can be operated by

**WATER, STEAM, RAILROAD OR SWEEP HORSE POWER.**

The attention of Foundrymen and Machinists as well as dealers is called to this Mill, and in order to produce them at the lowest rates to the purchaser,

### STATE AND COUNTY RIGHTS

will be sold on application to the undersigned.

Farmers wanting Mills, or others, would do well to purchase **COUNTY RIGHTS**, either alone or in Stock Companies.

Rights will be sold at prices to make it a liberal paying business.

1t

**R. L. HOWARD, Buffalo, N. Y.**

## STAMMERING.

**STAMMERING**—Cured by Bates Appliances. For Descriptive Pamphlet, &c., address

oct6t

H. C. L. MEARS & CO.,  
277 W. 23d street, New York.

### North Devon Cattle.

The subscriber offers for sale at a bargain

### FOUR PURE BRED DEVON HEIFERS

of different ages, (two are with calf) and one superior first premium **DEVON BULL CALF.**

Address  
j2t

ARTHUR GILMAN,  
Glynlyn Farm, Lee, Mass.

**FRANCIS BRILL,**

**Nurseryman & Seed Grower,**

**NEWARK, N. J.**

**STRAWBERRY PLANTS A SPECIALITY.**

Fruit Trees, Vines, Shrubs, Garden Seeds, &c. Catalogues on application. septf

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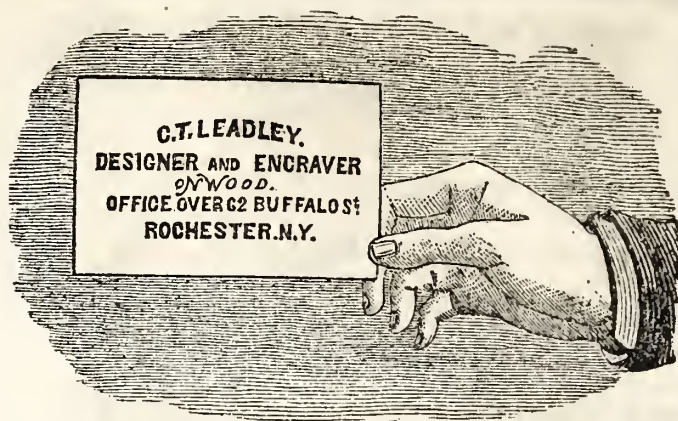
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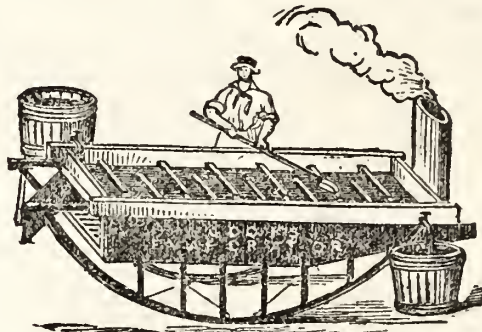
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Publisher and Proprietor *Genesee Farmer and Rural Annual*,  
December 1, 1864. ROCHESTER, N. Y.

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VOL. XXVI. SECOND SERIES.

ROCHESTER, N. Y., MARCH, 1865.

No. 3.

#### WALKS AND TALKS ON THE FARM.—NO. 15.

THE *Mark Lane Express* reviews the agricultural and commercial aspect of the year, doing so, it says, "with mingled feelings of satisfaction and regret—satisfaction that the nation has been abundantly and cheaply supplied, and regret that those who have ministered to this abundance, in their daily toil and anxieties, have themselves reaped so little in the way of remuneration." It has been a hard year for British farmers. Wheat on the average, in London, has brought only \$1.14 per bushel, while the failure of the turnip crop lessens the production of beef and mutton. The editor of the *Express* looks for somewhat higher prices the present year.

"How should farmers be shod?" is a question discussed in the first of a series of articles on Animal Mechanics, written by an "Engineer" for the London *Farmer's Magazine*. If it is important to shoe our horses properly, it is certainly of equal importance to look well to our own foot-gear. A boot impervious to water, easy, elastic, warm and durable, adapted to the rough usages of farm life, would be a great boon. As I was telling you some time ago, I wanted my men to "sup up" their horses at eight o'clock in the evening. The main objection to doing this I found was the difficulty of getting on their wet boots, after they had once pulled them off for the evening. The objection seemed so reasonable that I gave up the point.

I have just been reading a report of a discussion by the Carmarthenshire Farmers' Club, in Wales, as to the reason why "gentlemen-farmers" lose money by farming. It was claimed that there were many instances where "gentlemen-farmers" showed a good balance sheet, but it was admitted that, as a rule, little money was made by this class of farmers. The reasons assigned for it were in brief:—1. Want of personal attention to the details of farm management. The ordinary farmer is continually in his business, directing and economizing all its operations, and performs more or less work himself. On the other hand, the gentleman-farmer is seldom on

his farm, and does little or nothing when he is there. 2. Paying out too much money for labor. Much work is done which is not effective, and the men at best seldom perform a fair day's work. 3. Gentlemen-farmers buy dear and sell cheap. They leave this matter to those who have not that personal interest which is felt by ordinary farmers. 4. The want of practical knowledge.

The fact that gentleman farming seldom pays, especially in this country, must be admitted; but a "gentleman-grocer," or an amateur shoe-maker, would succeed no better. Farming, like any other business, must receive personal attention to make it profitable.

The Government has stopped the exportation of hay. Considerable quantities were being sent to England, but orders were sent from Washington to stop the business. The army will need all the spare hay there is in the country. This is right, provided the Government pays as much as the farmers can get for it by sending it to England and selling it for gold. It is said that Government pays \$26 per ton for it. In England, "meadow hay" is quoted at £4 4s. to £5 7s. 6d.; and clover hay, £5 5s. to £6 6s. In other words, in our currency, with gold at 200, clover hay brings from \$50 to \$60 per ton.

I wish we had a law empowering the Supervisor and Justices in each town to have ditches cut where they are needed for the public good, and have the expense assessed on the farms in the vicinity in proportion as each is benefited. The advantages of such a law, if properly carried out, would be very great, but perhaps farmers generally are not yet prepared to demand it. I know a case in this town where a ditch could be cut, costing not over \$500, that would enhance the value of the adjoining farms \$50,000.

A friend of the *Genesee Farmer*, in Ohio, writes me that he "resides among rather a peculiar set of farmers." He tried to induce them to take the paper, but they told him that they knew as much about farming as I did, consequently did not need to



read the *Genesee Farmer*. This is not very flattering, but he adds: "I was the only person in our neighborhood who got ninety cents for wool; and this I attribute to your judgment on the wool market." He says he "would not be understood as undervaluing his neighbors, for really they are a good set of fellows, notwithstanding a good portion of their corn and potatoes is yet unharvested! They would rather buy and sell calves in the summer season than attend to their crops. They are also very economical in regard to their fuel, as they generally wait till the winter is partly over before they lay in their wood."

It is strange how many farmers there are who would rather "buy and sell calves" than attend to their crops. They lack faith in the soil and in good culture, and prefer a nimble sixpence to a slow shilling. While they are making fifty cents by buying a sheep pelt, they lose fifty dollars by neglecting their crops. Such men have mistaken their vocation. They should turn peddlers or green-grocers.

W. M. Beauchamp, of Skaneateles, N. Y., the well known advocate of Hawthorn hedges, writes me that he shall be happy to send me, "as a donation to the Press, a few hundred plants, to set out this spring." I have got just the place to set them out, and will give them a fair trial. I do not see why the Hawthorn will not make as good a hedge here as in England. I am inclined to think the prejudice against it arises mainly from careless culture.

Messrs. Lalor Brothers, of Utica, N. Y., sent me to-day, as a present, a few packages of their "Sheep and Lamb Dipping Composition," for destroying ticks, curing the scab, &c. I hope to have no occasion to use it, but I am assured, however, that if I should, it is a sure cure. It is just the thing to destroy lice on cattle, horses, &c.

The Messrs. Lalor also sent me a box of ointment for foot-rot. I would advise my sheep to be careful how they limp or scratch or pull off their wool in my presence. Its dipped they shall be, without ceremony.

The printer and proof-reader at the *Farmer* office must be very careless,—or the reporter of our "Talks" must write a very illegible hand! There are more mistakes in the last number than usual. They make me say that Mr. Lawes has *raised* more crops of turnips than any man living. What I said was that he had "*weighed*" more crops, &c. He certainly knows how to raise good crops, but having *weighed* so many, he is skeptical as to the accuracy of *estimates* of crops that will give 40 or 50 tons per acre.

Then, in the same paragraph, they make me talk

of drilling turnips in rows 27 *feet* apart! I have said so much about drilling turnips in rows, using the horse-hoe frequently, that the printer must have thought that for once there should be no danger of cutting up or smashing the young plants. But rows 27 feet apart is rather too much of a good thing; 27 *inches* would be nearer the mark.

The pumpkin story did not get in straight. The vines bore 21 pumpkins, 13 of which weighed 160 lbs., and 5 others weighed 40 lbs.; while *three* dropped off the vines. The printer, thinking perhaps that pumpkins grow on trees like apples, and that such heavy fruit would be likely to fall, makes me say, "*They* dropped off the vines."

Mr. Richard Johnson, of Groveland, N. Y., takes me to task for saying that "a farmer in vigorous health has no business in the house during the day, even in winter."

He says he "once remarked to a physician that it was unfortunate that our summers were not longer, so that we could have more time to perform our farm work in." He replied that "it was better as it now is, as it gave the farmer more time for rest, reading and reflection. If we follow the advice of the writer of the 'Walks and Talks,' the farmer has no use for reading—not even the *Genesee Farmer*. I trust he would permit us working farmers to take the *Farmer* with us to the barn and snatch a few moments from constant toil to read his article in it, if nothing more!"

This is very well put. But of course it is begging the question. I never intended to say that farmers should have no time for "rest, reading and reflection." At the time I made the remark alluded to, it was quite dark by five o'clock, when the labors of the day were ended. If the farmer retires by nine o'clock he has four hours, two hours of which he can devote to reading, and the other two to social intercourse and reflection! From nine or ten till five or six the next morning, (eight hours,) will give him time enough to rest. Now if he works eight hours during the day, there will be four hours not accounted for. In this he can snatch a few moments from constant toil to read the *Genesee Farmer*! But because the weather is a little cold or stormy, shall he sit round the stove, in a half drowsy state, reading some wishy-washy "family paper," devoted to "progress" or "civilization?" There is certainly enough to be done on the farm, and at the present time, especially, when so much of the productive industry of the country is directed into other channels, it is the duty of every farmer to labor earnestly to increase the productiveness of his soil, and add to the wealth of the nation. The only wealth of a nation is its labor. It is this which must pay our taxes. Gold mines, oil wells, or what



is of far more consequence, a rich, virgin soil, will not pay our debts. These are of value only as affording opportunities for profitable labor. An individual may get rich by speculation, or by "striking oil," but not so a nation. It is to the industry and economy of the American people that we must look to pay our national debt. We have no respect for a lazy man at any time, much less when the very life of the nation depends on our activity, intelligence and economy.

Mr. Johnson further says: "But some will say the farmer has his long winter evenings for reading. Yes, but when he has worked all day in even the barn in winter, he will be about as dull and stupid as an ox, when he comes to the fire, and in place of reading will dream of his past or coming toil. Now why should a farmer remain out of doors all day in the winter? His cows and sheep want feeding but three times a day, and this should take but a small part of his time. What would you have the farmer live for? Is it to see how many bushels of grain we can produce; how many acres we can add to our farm; how many "greenbacks" we can hoard up—and what then? Must we always remain as stupid as the ox we drive?"

A man of ordinary intelligence, with a fair education, can work all day in winter without becoming as stupid as an ox. A young farmer who has spent a stormy day in the tool-house, fixing up some implement for spring use, or who has exercised his mechanical ingenuity in repairing a mowing machine, will have a brighter eye and a more vigorous intellect than the farmer who has sat all day with his feet on the stove reading Cudjo's Cave or the New York Ledger. The great difference between men is in the amount of *energy* which they possess. It is the one quality of mind above all others that a farmer needs. It is not a fussy, blustering, arm-swinging activity, but a thoughtful performance of whatever our hands and heads find to do. It will triumph over difficulties and increase with use. It should be cultivated with the greatest care. Reading is all very well, provided you read books that tax the intellect and furnish food for reflection. But reading family papers and light literature enervates the mind, and weakens its capacity for useful employment.

As a general rule, it is not work that impairs health and breaks down the constitution. It is care, anxiety, and "worry." Sitting round the stove in winter will not lessen these. Be actively and usefully employed, mentally and physically. You will have more confidence in yourself, more courage, more "pluck,"—and "pluck" is certainly a very essential quality in a farmer!

"Cauliflower certain to head," is advertised by

J. M. Thorburn & Co. To me this is a very attractive announcement, and I shall order a package of the seed at once. The importance of good seed is hardly realized. It is not only important to get seed that will germinate, but also to get good varieties; and not only so, but to get seed from the best specimens. Our vegetables, being more or less artificial productions, have a constant tendency to run back to their original state, and it is only by growing seed from plants selected with reference to the qualities which we desire, that success is attained. Last year, I raised a splendid crop of "*scullions*,"—simply, as I believe, because the seed was grown from thick-necked onions, that were good for nothing but to raise seed! I tried to get my onion seed from Vick, but it was all gone. Rapalje also had sold all he had. I finally paid \$10.00 for two lbs. that I met with, being assured that it was all right. Had I paid \$50 a lb. for good seed, I should have made money by it! At all events, I should have lost less.

Get good seed, even if you have to pay double the price for it. The best way is to deal with seedsmen who have a well-earned reputation at stake. Such men as Thorburn & Co., McElwain & Bros., B. K. Bliss, James J. H. Gregory, James Vick, John Rapalje, and other well-known seedsmen, have too much at stake to send out poor seed.

The indications are that we shall have an early spring, and it is time to be getting seed for the garden, and to be preparing manure for the hot-bed.

In this latitude there is little advantage in starting the hot-bed before the middle of March, but it is well to get the horse-litter drawn out and piled in a conical heap near where the bed is to be. If too dry, the heap should be moistened. The drainage of the barn-yard or stables is far better than water. If we had some blood to throw in, it would be a great help. When the heap begins to heat, turn it, shaking out the lumps, and putting the dry, outside portion into the middle. When the heap gets well warmed through, make it up into a heap at least three feet deep, and a foot or eighteen inches larger each way than the size of the frame to be used. If there is not time, the second turning may be dispensed with, but it pays to take considerable pains to get the manure in good order. It takes much more manure to make a good hot-bed than is generally supposed, but it can be used after you are through with it, and it is better to have too much than too little.

"There is less water in a fat animal than in a lean one."

"Who says so?"

Dr. Voelcker has recently delivered a lecture on the Fattening of Stock, and the *Country Gentleman* says he "pointed out that this process consists to a



great extent in the replacing of water in the animals by fat. In store pigs, for instance, about 61 per cent. of live weight is water, while in fat pigs the proportion is reduced to 43 per cent."

It does not follow from this that there is less water in the fat animal than in the lean one. For instance, suppose the store pig weighed, when put up to fatten, 200 lbs. He would then contain (61 per cent.) 122 lbs. of water. When fat he will weigh say 400 lbs., and contain (43 per cent.) 172 lbs. of water. The fat has not replaced the water. There is *more* water in the fat pig than in the lean one, though the percentage is less.

I got a letter to-day from a gentleman in Canada, residing at Mount Vernon, in one of the finest sections of Canada West. He says farmers complain of "Hard Times." Prices are very low. At Brantford, good, dry Maple wood sells for \$2.50 per cord; Wheat, 80@90c. per bushel; Barley, 65c.; Oats, 35c.; Corn, 56c.; Potatoes, 37c.; Beef, \$3@\$4 per 100 lbs., and other produce in the same proportion.

The Wheat crop was seriously injured by the winter, and also by the midge. One farmer had a hundred acres of wheat, put in in the best condition, from which he obtained only 400 bushels!

There, as here, the crop of Potatoes was good. The favorite variety in that section has hitherto been the Peach-blow, but when of large size they are apt to have a core in the centre, and they are now not so marketable as the Pink-eye, and some farmers think the latter will afford a better yield per acre. Last fall proved very favorable for turnips. The crops never were better, and this winter, when fodder is so scarce, owing to the drouth, they are invaluable.

You recollect that one of the subjects discussed at the Evening Meetings held during the State Fair last fall, was: "Is it Best for Dairymen to Raise their Stock, or Purchase?" Every speaker was in favor of raising rather than of buying cows. It was not contended that the dairyman could raise good cows as cheaply as he could purchase poor ones, but that the only certain way of originating or keeping up a good dairy, was to raise your own calves. The subject was further discussed at the late Annual Meeting of the Society at Albany, and the following resolutions, offered by Geo. Geddes, were unanimously adopted:

*Resolved*, That it is expedient and profitable for dairymen of the State of New York, to preserve the policy, as far as possible, of obtaining new herds by rearing their own stock.

*Resolved*, That heifers should be allowed to calve at two years of age.

An esteemed correspondent in Chemung county writes me: "You seem to think that Factories for

the Manufacture of Cheese cannot be sustained when the old range of prices come round again. It will be a great misfortune to the country should the Factories fail." This is true, but it is no proof that Factories can be profitably continued when cheese brings no more than it now brings in gold. He thinks my estimate of 75 cents a day for carrying the milk to the factory too high. It must be recollected that the milk is in almost all cases taken to the factory twice a day. If several farmers combined together, perhaps the milk could be sent for less, but otherwise the estimate is certainly not an extravagant one.

He claims that the Factories make much better cheese than is made in private dairies. This is true in the majority of cases. But it is by no means necessary. A good dairyman, who has good cows, good pastures, and who feeds liberally and manages his cows in the best manner, *can* make better cheese than the Factories; for the reason that they get their milk from dairies where no such care is exercised. All the milk is mixed together, good and indifferent, and all is paid for at the same price per gallon. There is no incentive to good farming.

Give me a good, well drained farm, the meadows stocked with a variety of grasses, and top-dressed occasionally; corn-fodder for soiling in dry weather, with liberal feed in the fall, when milk is richer in cheese than at any other season; let me have good cows, a well-arranged, well-ventilated, cool cheese-house, with a "help-meet" that takes a laudable pride in her dairy, and if I cannot make better cheese than the Factories, I would like to know the reason why? I have great faith in private enterprise, and I do not see why an intelligent farmer's wife, with her scrupulous care and cleanly habits, cannot make at least as good cheese as the factories. She does not send her clothes to a washing establishment, or her bread to a bakery, and I do not see why she should send her milk (one of the most delicate of all substances) to a factory.

In a private letter, John Johnston writes me, in allusion to my remarks about cutting corn for fodder before it was ripe, as follows: "It would not answer to cut your corn green to feed to sheep. It would get mouldy. Besides, *stock of all kinds eat corn fodder much better when not cut until the ears are fully ripe.*"

Mr. Johnston is feeding 220 Merino sheep, and he has invited Mr. Peters and myself to come and look at them. He weighed them when put up to fatten last fall, and he says he will weigh them again while we are present. He has fed them 200 lbs. of oil-meal per day, and, though they were rather a poor lot when he purchased them, he never had sheep do better—and never made more money by feeding. This is always the case, he says, when grain is high.



## PERMANENT MANURES NOT THE MOST VALUABLE.

A CORRESPONDENT of the *Canada Farmer* asks the editor of that paper the following questions:

1. What is the proper quantity of superphosphate to apply to the acre?

2. What is the proper way to apply it to turnips?

3. Is superphosphate of lime merely a stimulant, or is it a permanent manure?

4. Is bone-dust a permanent manure, and if both these manures are permanent, which of the two is most so?

To the first question the editor correctly replies, that from 200 lbs. to 400 lbs. is generally recommended.

In answer to the second, he says: "Care should be taken to incorporate the superphosphate with the soil, as it is of so concentrated a nature that it ought not to come into direct contact with plant roots." We have used superphosphate for many years, and never knew of its injuring the roots of plants. It differs in this respect from Peruvian guano. The English farmers drill in the superphosphate with the turnip seed, and find that it so stimulates the young plants that they are soon out of the reach of the "fly." We believe that turnip culture will never become as general as is desirable till we use superphosphate, and *have a drill to sow it on the ridges with the seed*. As the Canadian farmers raise so many turnips, we hope that drills of this kind will be introduced, if they have not been already. They are very common in England. It is a point of great importance. Superphosphate drilled in with the seed *will double the crop of turnips*.

In reply to the third question, the editor of the *Canada Farmer* says: "Superphosphate is a permanent manure (in a comparative sense) if really good, and its effects will be observed for many years after its application."

In reply to the fourth question, he says: "Bone-dust is a permanent manure also, but we cannot say which will last the longest. Our impression is that superphosphate will act the more quickly of the two, but whether the bone-dust will out-last it, is a point we are unable to determine."

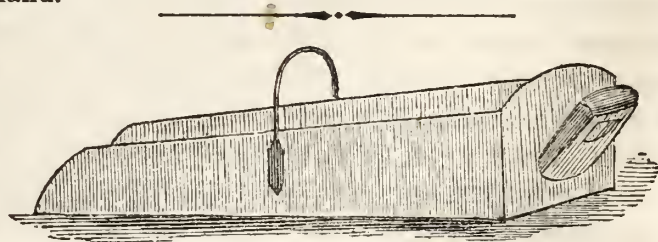
Now the fact is that superphosphate, "*if really good*" is *not* a permanent manure. The better the superphosphate the less permanent it is. And this, strange as it may appear to some, is true of all manures. Think a moment! Why do you pay more for bone-dust than for rough bones? The latter will last twice as long as the former. What the gardeners term "spit-manure," (that can be cut with a spade;) is by no means as permanent as the coarse, littery, unfermented manure from which it is obtained. And yet the former is considered the

most valuable. It is so in all cases. Hair, wool, horn, and hide contain as much nitrogen as the best Peruvian guano, but being *much more permanent*, are not considered half as valuable.

Why is this? Why are coarse, inch bones so much cheaper than fine bone-dust? The answer is plain. The fine bone-dust decomposes more rapidly and produces a greater effect, but of course will not last as long. If it could be ground as fine as flour it would act still quicker and produce a better result—or what is the same thing, a *less quantity* would be needed to produce a given effect.

So of superphosphate of lime. This manure is simply bones made soluble by sulphuric acid. Of course, being soluble, it acts quicker than bones, and is consequently less *permanent*. Two hundred pounds of bone-dust treated with 100 pounds of sulphuric acid—in other words superphosphate—will have a greater effect on an acre of turnips than half a ton of bones. But will it last as long? It is absurd to suppose so. If it is a really good article—in other words, if *all* the insoluble phosphate of the bones is converted into *soluble* phosphate—it will be all used up the first year. If only a portion of the bones is converted into soluble phosphate, it will produce a less effect, but will last longer. If it is a very inferior article—if it is little better than ground bones—it will be nearly as "permanent" as bone-dust.

The advantage of superphosphate as compared with bones, is that you get a much greater effect in a given time. You apply it to a crop and get the whole effect (if a good article) the first year. And this crop, if consumed on the farm, will make manure for the subsequent crops. In this sense, superphosphate is a permanent manure. Its effects will be seen on the farm five, ten, twenty, or a hundred years hence—provided you use the crops, as all good farmers do, to make manure and enrich the land.



AN IMPROVED GRAIN SCOOP.

MR. SHELBY REED, of Chili, has shown us a scoop for filling grain bags, invented by Abraham Scofield, of Scottsville, N. Y. The accompanying engraving will give a better idea of its construction than the most minute description. Any farmer can make one for himself in an hour. It is not patented. Mr. Reed says it will, from actual trial, fill bags twice as fast as will the ordinary scoop shovel. It will fill a two bushel bag at four dips.



## RAISING CALVES BY HAND—HAY FED.

A CORRESPONDENT of the *Germantown Telegraph* gives his method of rearing calves by hand. For a week or ten days he allows the calf to take all it will from the cow. It is then introduced to the "nursing bottle," which is made after the following manner:

"A box eighteen by fourteen inches and about eighteen inches high, securely fastened at a convenient distance from the ground, say about the height of a cow's udder, (a common strong bucket will do as well.) I then took a worn-out gutta percha drill tube and fastened the larger end securely on the bottom of the box, leaving the tube in an upright position; over the upper or small end of the tube I sewed a piece of soft, thick leather; in that part of the leather which came opposite to the end of the tube, I made a hole about as large as a goose quill; I also made several similar holes near the base of the tube, as near as possible to the bottom of the box.

"The box being filled with a mixture of *new* and *skimmed* milk, the calf is brought up to the box, and after having put a breech-band on to prevent that universal tendency of calves to set back, the end of the tube is placed in its mouth; the milk of course stands at the height in the tube as it does in the box, say two or three inches from the upper end; the calf, not knowing the difference between the artificial and natural tubes, at once begins to suck; the first effect is always a fit of coughing, for the stream of milk is larger than it bargained for, but it soon gets over this, and drinks until satisfied. The next time for feeding it is taken up and the tube inserted in its mouth, and then it is left to itself; after this, all that is necessary is to pour the milk into the box.

"If milk enough is not to be had, I have sometimes supplied the deficiency with 'hay tea,' which is made by pouring hot water over *good* clover hay, and allowing it to cool until the proper temperature to feed. I have now a calf six weeks old, which has, since weaning, been fed on 'hay tea' alone, and is now in good order and condition, and as lively as a cricket. I adopted this course, not from a want of milk, but for an experiment. At first the calf showed the change, but now is as good as any of them. I usually give them milk or hay tea for from *six* to *ten* weeks after weaning."

TO CURE A "FELON."—As soon as the part begins to swell, get the tincture of lobelia, and wrap the part affected with cloth, saturate it thoroughly with the tincture, and the felon will soon "die"—poisoned instead of hung, as all *felons* ought to be. An old physician informs us that he has known this to cure in scores of cases, and it never fails if applied in season.—*Scientific American*.

## AGRICULTURAL IMPROVEMENTS—NO. 1.

EDS. GENESEE FARMER: Among all the various improvements which are going on at the present day for the advancement of mankind, there is not one which justly demands so much, and comparatively receives so little attention, as does the improvement of *agriculture*. As much as has been said, and as many eulogies as have been pronounced by orators upon the benefits and blessings of a farmer's life, yet very little personal effort has been made to elevate his condition as an *intellectual man*. We are led to believe that very many in speaking and talking of agricultural improvement, think only of the improvement of the *soil*, while the mind and the intellect, or that part of man which raises him above the brute, or a machine, is left to stand or take care of itself as best it can. In the course of the last ten years, from my own reading and observation, we are satisfied that a great deal more has been written upon the best manner of cultivating crops, and going in for an immediate improvement of the farm, than has been for the improvement of the *farmer's mind*, in connection; and of this latter class, we have reason to fear, from personal observation, that the great mass of us (farmers) would come under the title of farms rather than mind. We are not one of those who believe that the improvement of the soil and the intellect should be separated. On the other hand, we know that by judicious men the two will always be connected together. Let any one that feels interested in this matter go through some of the best farming districts in the State and talk with the farmers personally on this subject, and then if he does not arrive at the same conclusion, we shall be mistaken. Now, agricultural improvement, as we understand it, does not consist in raising large beeves, or fat wethers, or even larded porkers, or in one hundred bushels of corn to the acre; nor in getting the first *premium* at cattle shows. For all this has been done, and more too, forty years ago, and yet the principles of agriculture were not half as well understood then by the masses as they are now; and even more, they are not half understood by us. Strange as it may seem, we know that there are thousands of dollars paid out annually, for extra breeds of *cattle, sheep, swine, &c.*, to where there is three or five dollars given for *agricultural* reading, to improve the mind. Just as though it was so much more important for the farmer to have extra stock, than it is to try and improve his own condition in life. We are aware, however, that in the last few years agricultural papers, both weekly and monthly, have circulated very extensively among the farmers, and have been the means of exalting their condition, and doing a great deal of good. And yet a large majority of



our farmers even now are ignorant as to reading, while many of those who do, read them for what they are, and then stow them away for waste paper. But after all, take any one agricultural paper, however large its circulation, that is exclusively devoted to the farmer's interest, and yet we think we can say, and not be much out of the way, it does not receive one-half the *patronage* it ought among the farmers themselves. Of all the different classes of men under the sun, we do not know of any, without it is the farmer, who thinks that all the *knowledge* necessary for a man to have about his business will come to him by *nature*.

J. L. HERSEY.

Tuftonborough, Carroll Co., N. H., 1865.

### SALMON BREEDING.

SALMON were formerly abundant in the rivers and streams that flow into Lake Ontario. They have now almost disappeared, and the question of restocking them has recently been discussed in the *Canada Farmer*. A correspondent of that paper argues that it might be done at little trouble and expense, and thinks the Canadian Government should erect a hatching establishment on some stream, or the Lower St. Lawrence, where salmon are found. Dr. Buckland states that a four year old salmon weighs four pounds, and a female of that weight would probably contain 12,000 ova.

The cash receipts of our Scotch fishery in 1862 were \$57,000, and this result was obtained principally by the system of artificial hatching. There is an increasing demand for salmon in this country, while the supply is rapidly diminishing, and it would seem that the time has arrived to make an effort to propagate this valuable fish in the way proposed.

**WHY BOOTS SHOULD BE POLISHED.**—Brightly polished boots are cooler in warm weather and warmer in cold weather than dull and dusty boots; for in warm weather they reflect the sun, which dusty and dirty boots absorb; and in cold weather the clean boot does not allow the warmth of your foot to radiate freely, whereas the unclean boot does. Clean, bright boots are consequently more comfortable, as well as respectable, both in warm weather and cold. Not only will different substances, as iron and wood, give out heat or take it in, more or less, but the same substance radiates heat more or less actively as it is bright or dull, rough or smooth. Now, dirty boots are rough as well as dull. They have a surface, of many little hills and valleys, so that in truth there is more surface for the heat to pass through either way. As a rough surface is a large surface, more heat from within and without always passes through dull and dirty boots than polished ones.

### PRODUCE OF TWO COWS.

EDS. GENESEE FARMER: You published in the December number of the *Farmer* a statement made by me, of the produce of two cows during the month of May last. The following are the results for eight months, commencing May 1st and ending January 1st:

Butter made.....	480 pounds.
Milk sold.....	955 quarts.
Milk used in family.....	488 "
Estimating the butter at 50c per pound, we have.....	\$240.00
Milk sold and used, at 6½c per quart is.....	90.19
Sour milk fed to hogs .....	15.90
Making in the aggregate.....	\$346.09

In estimating the value of sour milk, I would state that I had on the 1st of May two hogs that weighed two hundred and fifty pounds. They were slaughtered Nov. 15th, and weighed at that time seven hundred and eighty-four pounds. They were fed during the time the milk from the cows and twenty-five bushels of corn, ground. Estimating the hogs at ten cents per pound and the corn at one dollar and fifty cents per bushel, we find the result as stated. The cows were kept on grass only to Sept. 1st. From Sept. 1st to Oct. 15th were fed with grass and two or three hills corn each per day. After that time to Jan. 1st, three quarts of corn meal each, with few roots and plenty of hay and corn stalks, also sour milk and slops of kitchen from Nov. 15th, and kept warm and well sheltered during stormy weather—milked at about 6½ o'clock morning and evening, most of the time by one person. The milk was set in tin pans holding about four quarts each, and little less than two quarts in each pan, an item worthy of the attention of butter-makers. The cream was taken off as the milk commenced to thicken at the bottom, also of importance in making good butter. The cream was churned at intervals of three days, at a temperature of about seventy-five degrees; time occupied in churning usually about fifteen minutes. I am convinced that it pays to keep good cows, to give them good care and plenty of good food at regular times, be regular in the time of milking, let the same person do it, and have the conveniences for setting the milk, keeping it as near an even temperature as possible.

Elba, Genesee Co., N. Y., 1865.

J. C. DEAN.

**WONDERFUL LINIMENT.**—The following liniment is good for all sprains, bruises, lameness, &c.:—2 oz. oil of spike; 2 oz. origanum; 2 oz. hemlock; 2 oz. wormwood; 4 oz. sweet oil; 2 oz. spirits ammonia; 2 oz. gum camphor; 2 oz. spirits turpentine. Add one quart of proof spirits, 95 per cent., mix well together, and bottle tight. This liniment cannot be equalled, and is actually worth one hundred dollars to any person who keeps valuable horses. Omit the turpentine, and you have the best liniment ever made for human ailments, such as rheumatism, sprains, &c. Try it.—*Wisconsin Farmer*.



## THE ENGLISH GRAIN TRADE OF 1864.

IN its Review of the Grain Trade for 1864, the *Mark Lane Express* mentions as "among the circumstances most worthy to be recorded":—1. The Danish War. 2. The duty on all grain being made payable by the cwt., instead of by the imperial quarter, of eight bushels. 3. The cessation of supplies of grain from Egypt. 4. The "nearly total falling off of shipments of maize from America."

It seems that Egypt has turned her whole attention to the culture of cotton, and having become a considerable importer of grain, has prohibited its exportation. She formerly sent 8,000,000 bushels a year to England.

Russia, in consequence of great drouth, had small crops to the acre; and afterwards, from wet weather, the quality was injured, so that shipments from Petersburg and the Azoff are expected to be inferior to those of 1864.

The *M. L. Express* says:—"America will, therefore, be in a great measure our guiding-star as to future supplies, and consequently as to future prices; but considering that present low prices are creating an unusually large consumption of wheat, and that considerable quantities have been used as animal food, we think we can take off at the rate of seven million quarters foreign wheat and flour per annum up to next harvest, and yet improve somewhat upon present rates. Since January, 1862, prices have fallen continually, with the exception of the short period of excitement during the "Trent affair," and we are now at a lower price than on any previous occasion in the present century, except in October, 1851, viz., 35s. 6d., (\$1.06 per bushel,) and in February, 1836, viz., 36s., (\$1.08 per bushel.)

The year 1864 commenced with a weekly average price of wheat of 39s. 10d. per quarter, (\$1.19 per bushel,) and closed with 37s. 10d., (\$1.13 per bushel.) The highest weekly average was 41s. 1d., (\$1.23,) and the lowest 37s. 10d., (\$1.13.) This is a variation of only 10 cents per bushel!

In 1863, Great Britain imported 44,603,184 bushels of wheat, and in 1864, 43,252,244 bushels. Of this, America contributed 14.75 per cent.; Canada 3.37; Russia, 35.45; Prussia, 32.52; France, 0.91.

Two new societies have been formed in France. One is a Bank of Agricultural Improvement, "which proposes to destroy the usury weighing so heavily on the rural districts, by lending capital with facilities for repayment at the rate of 6 per cent. at the most." The other is a society which proposes to purchase properties offered for sale, and to improve them by drainage, irrigation, claying, deep tillage, planting, construction of buildings, &c., and then to re-sell them in farms.

## A FINE HERD OF AYRSHIRE CATTLE.

A CORRESPONDENT of the *Country Gentleman*, Mr. Geo. A. Adams, of Hopkinton, Mass., has recently visited the farm of H. H. Peters, Esq., of Southboro, Mass., well known throughout the country as a successful breeder of Ayrshire cattle. A few years since, Mr. Sanford Howard purchased a considerable number of Ayrshire cattle for Mr. Peters, from the best breeders in Scotland. These formed the basis of his herd. Mr. Adams says:

"By constant attention and judicious expenditures, Mr. P. has raised up a herd that is well worth a day's travel to look upon. At the time of our visit, the herd numbered one hundred and fifteen head, which, with his numerous horses and colts, and a few sheep, comprised such a collection of valuable animals as can be found nowhere else in Massachusetts, if, indeed, in New England.

"In no other cows have I seen the marks of milking qualities so prominent. The carcass is not heavy, but the stomach is large and secretive, and digestive powers apparently active, giving great vigor of constitution and an active temperament. The loin is broad, tail long and slender, teats wide spread, and the lacteal veins very large and projecting. And these marks are not deceptive, as will appear from statements of the yield of these cows. For instance, the cow Jean Amour produced from June 10th to June 20th, 521½ lbs. of milk, or over 52 lbs. per day. And from June 1st to Sept. 23d she averaged 49 lbs. and three ounces per day, giving 5,612½ lbs. in 114 days.

"These cows are tended with constant care, and the stalls and floor-ways always presented the same neat appearance. The conveniences for feeding are unsurpassed, and the arrangements of the barn complete in every respect. An apparatus for steaming fodder has been used, but was not in operation at the time of our visit.

"Mr. Peters claims to be able to furnish the farmers of New-England with a class of cows that excel all others in the great desideratum for profitable dairies, viz., the production of milk. If he can do this, he has attained an object which should satisfy any reasonable ambition, for when we reflect upon the value of the milk product of the country, amounting, it is said, to \$160,000,000 annually, we can but conclude that farmers must search more earnestly than they have yet done for superior milking qualities, if they would discover the true secret of successful farming.

"In Flint's *Milch Cows and Dairy Farming* are recorded some instances of enormous yields of milk from the Ayrshire cow. Two hundred and fifty dollars is said to have been realized from one cow in Glasgow, in the space of seven months. John P.



Cushing, Esq., of Massachusetts, imported a cow which gave 3,864 (beer) quarts in one year, being an average of ten and a half quarts each day."

#### A DIMINUTIVE BREED OF CATTLE.

IN the report of the Secretary of the Massachusetts State Board of Agriculture for 1862, Mr. Flint gives the following description of the cows of Brittany, a province in the north of France, as observed by him at the International Exhibition in London:

"The little Bretagne cows pleased me exceedingly. Standing only about three feet high on their legs—the most fashionable height—mostly black and white, now and then, but rarely, a red and white; they are as docile as kittens, and look pretty enough to become the kitchen pet of the hard pressed mountain or hillside farmer, with pastures too short for a grosser animal. Ten pounds of hay will suffice for their limited wants for twenty-four hours, and they would evidently fill a ten-quart pail as quick and as long as any other cow.

"Those pretty cows will often hold out in milk, so the herdsman said, from fifteen to eighteen months after calving, and often begin with the first calf with six or seven quarts a day. The horn is fine, not unlike the Jersey, but smaller and tapering off gradually, and the escutcheon or milk marks of Guenon generally very good. Good cows are held from sixty to seventy dollars a head, a fancy price of course, but I am not sure that they would not pay six per cent. on the investment, as well as most 'fancy stock.'"

#### A PRETTY MOWER IN SAXONY.

AT Dresden I saw the Sistine Madonna with inexpressible delight; but I saw another sight not quite so poetical and ideal, yet still to be looked upon with interest and pleasure. One day I was walking through the public square to the picture gallery. I happened to notice a woman mowing. I stopped; sat down and looked at her for half an hour. She was apparently two or three and twenty. Her head was finely formed, and set firmly on her shoulders. Her hair was neatly braided round it; her features were regular; eyes bright blue; form vigorous, well rounded, like that of Dorothea in Goethe's poem. From her ears hung golden earrings. She wore a bright colored petticoat, reaching a little below the knees; her legs were bare, and her feet encased in embroidered shoes. She was the picture of health and robust beauty. She swung the scythe with an inimitable ease and grace; and as she did so, there was a placid expression on her pleasant countenance, which spoke of a good conscience, a contented spirit, and a willingness to do the work which her destiny pointed out. I exam-

ined the swaths; the grass was cut as smooth as velvet; you could not tell where one swath ended and the next began. An English lawn looked no smoother. It was a work of art, high art; and an American farmer might have taken a useful lesson. I wish I could have taken her portrait as she stood before me.—*Prof. Felton.*

#### FARMING IN MICHIGAN.

EDS. GENESEE FARMER: I have been to the post-office to-day and sent off a dollar for the *Farmer* for another year, and have just been reading your "Walks and Talks," &c., in the December number. I have often felt inclined to write to you, or O. Judd, and as often concluded *not* to do so. First, as to the price of land. Farms are freely sold here, in Cass Co., for \$25 to \$50 an acre, which is higher than those south of Rochester.

We have had the driest summer ever known here since whites inhabited the country. But with careful feeding we shall carry our stock through. We cut more wild or marsh hay than common, and a small wad of tame hay contains a vast amount of nutriment compared to the hay of common seasons.

Now for the principal topic. You and Mr. Judd, I suppose, wish to circulate your papers here in this Western country. You talk about composting, *composting*, COMPOSTING. Why, sir, it is just the same as so much Greek or Choctaw to us. Now, sir, the way it is done here is just this:—1. Feed corn-stalks to cows in the public road. 2. Fatten hogs on some sand-bank, at the bottom of which is a bottomless slough. 3. Build a nesting place for hogs in the winter in the public road, and feed them there, standing by with a horse-whip, to keep off neighbors' hogs. The above are Michigan laws, although some people break them.

What I wish you Editors to do is to coax the people to feed their stock in some kind of a yard, and let the refuse hay, corn-stalks and straw be trodden under foot, forming a mass of manure I do not care how deep. Then my plan is to draw it out early in the spring, on to some old pasture, plow it in, sow oats, and if I do not get a kernel of grain, the manure is SAFE, at any rate. H. W. RIDER.

Silver Creek, Mich., 1865.

REMARKS.—It is not often that we say much about composting manures in the *Genesee Farmer*. We believe in manure, but have less faith in the economy and benefits of "composting." No amount of mixing, fermentation, &c., will make rich manure out of materials that do not contain the necessary elements of plant-food. Composting creates nothing. It may prevent the escape of ammonia, but with proper care there need be little lost of ammonia from ordinary barn-yard manure.—EDS.



### GREAT PROFITS FROM A SMALL FARM.

WRITTEN FOR THE GENESEE FARMER BY C. N. BEMENT.

ONE of the greatest mistakes made by most farmers is the disposition to have large farms. This is mostly a matter of pride, or it may be misapprehension in relation to the principles of tillage. The fact is well proved, that a small farm well cultivated will yield more than one double in size, if badly cultivated. Rich farmers naturally have large ones—as large as they can manage and keep in good condition; for if there is profit in small ones, there will be corresponding profits in large ones, provided the culture be the same; but poor farmers, or those of limited pecuniary means, will always remain poor, and will have to toil hard, if in this respect they undertake to follow the example of such as have unlimited means. If the products of the soil cannot be increased to any indefinite extent by progressively high culture, it is known, because it has been demonstrated in thousands of cases, that they may be increased far beyond what most ruralists think possible. The common mode of impressing them with this fact is a reference to the difference between the products of half an acre of land under ordinary garden culture, and the products of the same under ordinary farm culture. This difference must be entirely the result of difference in the degree of manuring and in the quality of the tillage.

Allusion is also made for the same purpose to Flemish agriculture. In Flanders, a family of six persons can be supported on the products of about four acres; that is, two-thirds of an acre to each person; and in the same proportion, whether the family be larger or smaller. Upon this principle of apportionment the land is arranged in farms; and we have cases in our own country which will show that in many localities the same can be done here. Even more than this has been accomplished. In 1849, the editor of the *Maine Cultivator* published the products of a single acre, in that State, which were sufficient to support the family occupying the little farm or garden, whichever it be denominated. If one family can obtain a good living from one acre, another family can do the same. If it can be done in the State of Maine, it can be done in the State of Vermont, in Connecticut or New Jersey. So it may be done elsewhere. On one-third of this acre were raised thirty bushels of sound corn, besides the refuse. This was sufficient for the use of the family, and to fatten the pork. From the same ground, or in connection with the corn, there were raised between two and three hundred pumpkins, and a family supply of dry beans. From a bed of six rods square, sixty bushels of onions were obtained. These were sold at one dollar per bushel, and the proceeds converted into flour. Thus from

one-third of an acre and the onion bed the bread-stuffs were furnished. The rest of the ground was used for vegetables—potatoes, cabbage, parsnips, beets, sweet corn, peas, beans, cucumbers, squashes, melons, with some fifty or sixty bushels of sugar beets and carrots for the cow. Besides, there were on the acre strawberries, raspberries, currants and gooseberries, in great abundance, and a few choice apple, pear, plum, cherry, peach and quince trees, and even a flower garden. Would not a farmer become rich on a hundred—or fifty—twenty-five acres, cultivated in the same way?

There was an anecdote told, a few years since, in a foreign paper, of an English farmer, illustrating in a larger way the same principle; that is, of the advantage of small farms. The individual in question, from inheritance probably, had one thousand acres of land, and a small cash capital, but was just able to live comfortably, having no surplus income. He had three daughters, and on the marriage of the eldest he gave her two hundred and fifty acres of his land, cultivating the same as previously. Not long after he gave two hundred and fifty acres to the second daughter, on her marriage, thus having left but five hundred acres for cultivation. Next the third daughter married, and according to arrangement received one-half of the five hundred acres, so that the father had left for his own use but two hundred and fifty acres. To him the prospects appeared disheartening. However, he adopted a higher mode of tillage, increased his own diligence, and applied all his cash capital to these two hundred and fifty acres. Greatly to his surprise, he soon found that he was able to raise double now to what he had before raised on a thousand acres. The consequence was, he was annually able to lay up in cash more than half of his income; and at his death he was found to have become a rich man. In the above facts there was every appearance of authenticity. Moreover, they are so much in accordance with those known to us, that we have no doubt of their truth.

### GREAT PRODUCTS OF THIRTY ACRES.

The following comes under the sanction of the late Gen. James Talmage, President of the American Institute:—"Connected with the Bloomingdale Asylum," said the General, "within the northern limits of the city of New York, is a farm of forty acres, ten of which is in woodland, and the other thirty occupied as a farm and garden and for the buildings of the establishment. It appears that Gen. Talmage, in 1848, had occasion to visit the premises, with which he was much pleased, and he accordingly highly commended the prudent and judicious management which had led to the results annexed. It may accordingly be relied upon. The following



statement is a faithful account of the expenditures on that farm, and the income from it in the year named, also showing the net profits over and above the expenditure; being the pretty little sum of two thousand one hundred and forty-two dollars and forty-six cents, from thirty acres of land, in a single year:

Income from the garden .....	\$1,996.40
" " farm .....	1,889.62
" " orchard .....	359.50
Sales of live stock.....	97.50
Total income.....	\$4,343.11

EXPENSES.

Farmers' wages, including one man the whole year at \$25 per month, and four hands employed about half the year at \$10 per month; a woman, also, to assist in the labors of the establishment .....	\$773.90
Board of persons thus employed.....	520.00
Expenses upon farm implements.....	12.80
Grain fed to the cows.....	120.00
Hay and vegetables consumed.....	388.76
Manure purchased in addition to that made on the farm .....	308.00
Live stock purchased.....	78.09
	—————\$2,200.65

Net balance.....\$2,142.46

Thus it will be seen that when the expenses are taken from the income there will be remaining a net balance of two thousand one hundred and forty-two dollars and forty-six cents, for the profits of thirty acres of land; or at the rate of seventy-one dollars and forty-one cents per acre. Here is the case of the profits of agriculture about which there can be no mistake. True, the farm is close to a market; but with our present railway facilities, it matters little whether the farm is close to a market or is ten or fifty miles from it with most products. Besides, crops may be regulated according to distance from market, and consequent conveniences for reaching it. Indeed, many articles formerly raised of necessity, within a few miles of the market, are now fifty or seventy miles from it; and other articles, yielding as good a profit, as may be produced, contiguous to a railway, one hundred miles from market.

Poughkeepsie, February, 1865.

FOR THE LOSS OF CUD.—When cattle lose the cud, they will sicken and die unless a cure is obtained. The best remedy that I know is to take half the cud from another creature, and put it warm into the mouth of the one that has lost it. This is a sure cure.—J. L. HERSEY.

A SURE CURE FOR CORNS ON THE TOES AND FEET.—Take white pine turpentine; spread a plaster; apply it to the corn; let it stay on till it comes off itself; repeat this three times—never fails curing.—J. L. HERSEY.

THOSE who would keep their buggies and carriages in good order, should place a wrench on every nut at least once a month. This will save nuts, save bolts, and prevent rattling, and wear and tear.

“FABULOUS” CORN-FODDER.

IN February number *Genesee Farmer*, I notice an estimate of the amount of corn-fodder on an acre, that seems to me, as Mr. Peters says, “truly fabulous.” He thinks it possible to grow 250 tons of green fodder per acre, and to save say one-tenth (25 tons) of dry fodder. I do not know what green corn-stalks weigh, but have grown them for some six or eight years, and four or five acres a year usually, mostly for soiling, but several times for curing for winter use. I have paid no attention to its weight per acre when dried, as it varies so much that I can find no use in doing so. When got in, as well dried as is possible at that time, it is still so juicy that by twisting the butts the juice will often run out. When kept until February, it weighs but little, if any, more than hay. I have repeatedly weighed it (cut up for use) by the bushel, in endeavoring to form correct estimates in steaming food for cattle, and finally came to the conclusion that I must estimate it in bulk, taking hay as the standard, to even approximate to any correct result. For milk, it is of course more valuable in its greenest condition. In 1862, I raised two pieces, of one acre and three-quarters of an acre respectively, for curing, and kept account of the expense attending it. I annex a statement of this trial, showing that I consider it as costing me about \$16 per ton, estimated in bulk as hay. You will notice that I give half the manure to this crop. You know my light, leachy soil, and I know that I do not over-estimate the manure lost. Of course this is the main expense, and on other soils, rich enough to need little or no manure, it could be grown with very much less expense. My experiments prove that I can grow nearly twice as much per acre by sowing in drills, and cultivating once or twice by horse-hoe, than by sowing broad-cast. I sow in drills about three feet apart. These pieces were Southern corn, and were cut in the tassel, (in blossom,) being at the time about twelve feet high. I hope we shall hear from others who have experimented in this matter.

ESTIMATE—ONE ACRE.

Half manure.....	\$20.00
Labor .....	10.00
Spreading.....	1.50
Plowing .....	4.00
Harrowing.....	1.00
Furrowing.....	1.00
Twenty bushels horn dust.....	6.00
Seed, 3¼ bushels.....	3.00
Labor on seed, &c.....	3.00
Hoeing twice .....	2.00
Cutting.....	5.00
Binding.....	3.00
Care of and cutting .....	4.50

Total .....\$64.00

Estimated in bulk same as hay, as four tons .....\$16.00

The three-quarter acre was less expensive somewhat, and also a little less in yield. It amounted to the same thing. I do not doubt that it can be raised much cheaper in many places, and think I can myself do better, but this was a fair trial at the time.

H. S. COLLINS

Collinsville, Conn., 1865.



## GETTING SUBSCRIBERS TO AGRICULTURAL PAPERS.

THE *Country Gentleman*, the senior editor of which is, we believe, the oldest living agricultural publisher in the United States, makes the following remarks in regard to increasing the circulation of agricultural papers:

"There seems to be no doubt that about nine farmers out of ten take no agricultural paper whatever, even if we include as agricultural papers those which are very largely given up to other subjects. There is thus evidently great room and a great necessity for the extension of their circulation. To accomplish this object depends mainly upon those who voluntarily devote a portion of their time to procuring subscribers, since the majority of farmers who might willingly assent if requested in person, would probably never be reached by any advertisement of the publishers, however widely disseminated. Newspapers have eager friends to advance their interests, among those belonging to the same party, who are desirous of spreading the party doctrines. Religious journals have a corresponding influence among the churches of their own denomination, constantly working in their favor. But periodicals like our own are more than any others dependent upon disinterested exertions, put forth on the part of those who see the importance of an Improved Agriculture, and are determined to advance it by every means in their power. It is gratifying to us to be able to bear witness to the number who have thus unselfishly devoted much time and labor in so good a cause. To them we owe, in a great degree, whatever success has attended our efforts during thirty years past; and each recurring New-Year has added new friends to their number."

There can be no doubt of the truth of these remarks. Agricultural journals, more than any others, are dependent on the efforts of those who voluntarily devote a little time to getting subscribers among their friends and neighbors. But for them, the circulation of agricultural journals, no matter how useful and interesting, would not be sustained a single year. We have known many such instances as the following: Mr. A. gets up a club of twenty subscribers to the *Genesee Farmer*. The paper apparently gives satisfaction. Year after year, Mr. A. promptly sends in his list. At length he moves away from the town. And the next year, *not one of those twenty farmers who have taken the paper for years subscribe for it!* We recollect a case in Pennsylvania, where a gentleman got us over a hundred subscribers to the *Genesee Farmer*. During the summer he left the place, and the next year *we had not a single subscriber at that post-office!* It may be said that this must show that they did not care for the paper,—and in truth it would seem that they did not care very much! The real explanation of such instances, however, is simply this: They would take the paper if they could do so without any trouble. Had they been asked to subscribe, they would have done so. They were not called upon, and they had not of themselves sufficient energy to sit down and order the paper. It is precisely as the

*Country Gentleman* says: "Agricultural journals are more than any others dependent upon disinterested exertions, put forth on the part of those who see the importance of an Improved Agriculture, and are determined to advance it by every means in their power."

## AMERICAN CHEESE IN ENGLAND.

THE *Mark Lane Express*, in an article on American cheese, says:

"Were cheese-making as well understood in America generally as it is in Europe, the demand would be greatly increased. It is admitted by themselves that comparatively little of the prodigious quantity produced in America can be termed a first-rate article. While many enterprising dairymen supply an article creditable to the country, in Europe American cheese is not purchased with that confidence with which British cheese is named, and for the reason that the processes have not reached that perfection which alone contributes to uniformity of excellence and distinctiveness of character. When this point is attained, a taste is cultivated, and increasing demand follows, and profits enlarge. Although the price of cheese has declined in the New York market from 10 to 13 cents per lb. some eight or ten years ago to a little over 7 cents in the last few years, it might be sold with profit even lower."

It seems rather strange to us to hear that cheese has *declined* in New York, especially when we were congratulating ourselves on getting such high prices. We presume, however, that *in gold*, cheese is not as high as it was eight or ten years ago.

Is it true that "cheese can be sold with a profit" in this country at less than 7 cents per lb.? What say the "cheese factory" gentlemen?

HOW TO SUCCEED IN BUSINESS.—Ricardo's rules were: 1. Cut short your losses. 2. Let your profits run on. In order to do this, one must have *experience*—and to avoid a too costly experience, begin small. Feel your way. Bonaparte, when in Egypt, he and many of his officers were riding out in a dark evening on the sea beach, where it was very wide. Suddenly the tide came in rapidly, and the water grew every moment deeper where their horses stood; they could not see which way was dry land, they became alarmed and bewildered, and destruction threatened them. Bonaparte seemed never to fail for an expedient. He ordered all to form a circle, with horses' heads outward. They did so. He now ordered all to ride ahead; if any found the water growing deeper, they were to turn about; if any found it growing shallower, they were to ride on, and all the rest to follow. This brought them to dry land. It is so with business. Proceed cautiously in different directions; if failure results, wheel about; if success attends, go ahead. This is the way to carry out Ricardo's rules, "Cut short your losses—let your profits run on."—*Rural Affairs*.



## HARROWS AND HARROWING.

EDS. GENESEE FARMER: Some years ago you gave a cut and description of a Scotch harrow, and also of the Geddes harrow. I do not bind the *Farmer*, and should esteem it a favor if you would send me the number containing the article.

RICHARD HAMILTON.

The article referred to was written by the late J. H. Bixby, and appeared in the June number of the *Farmer* of 1858, page 182. The subject is one of general interest, and we re-publish the article entire:

The harrow is an indispensable implement in the cultivation of the soil, and next to the plow in its importance to the farmer. There are many forms given in its construction; some of these we shall notice and describe.

The Scotch or Square Harrow, when made of light timber and furnished with small and sharp teeth, is one of the most effectual for the pulverization of smooth land. Fig. 1 suf-

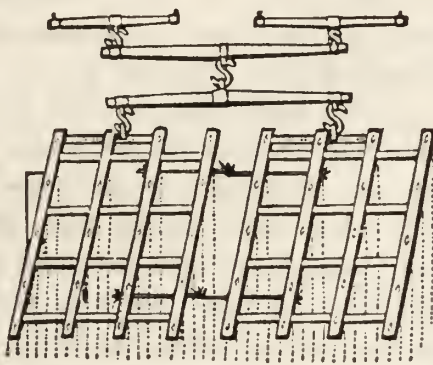


FIG. 1.

ficiently explains its arrangement and construction.

Another form of Square Harrow in common use is shown in fig. 2. It requires less gearing, and accommodates itself to uneven land more perfectly than the former. Sometimes thirty, and sometimes thirty-six teeth are used.

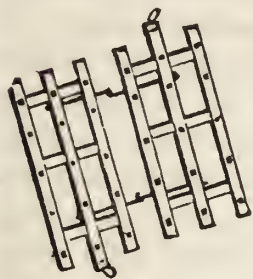


FIG. 2.

The Geddes Harrow (fig. 3) is said by good judges to be the best in use. Its wedge-like form enables it to pass obstructions easily, its motion is more even and steady, and consequently easier for the team. An improvement in the draft is effected by attaching a chain to staples on each side, as far back as the second tooth. This prevents the harrow rising in the middle, as it will do if the traces are as short as they should be for easy draft. The timbers of this harrow may be of 3 by 4-inch scantling, tho' for the square harrow 3 by 3-inch is sufficiently heavy.

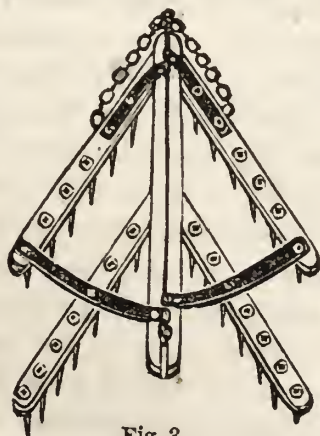


FIG. 3.

Three-quarter inch teeth are large enough for any purpose. They should be pointed with steel, and kept sharp. The cost is somewhat increased, but

the improvement is real, to have a shoulder underneath, and a nut screwing on at the top, as the teeth are then firm and cannot drop out. A harrow made of good timber, with a good coat of paint, renewed as often as necessary, will last a long time.

Harrows with wooden teeth are in common use among European farmers, and nowhere is harrowing better understood or performed than in the old countries. We may, and no doubt do, have as good implements; but we do not use them as thoroughly, or as many times in succession. We are "a go-ahead people," but we are learning daily that thorough work is the work which pays. In the use of the harrow, the work may be facilitated by keeping the implement clear of sods and stones, and the speed of the team should be increased above that when employed at the plow. A team will soon learn to walk just on the edge of the previously harrowed ground, and we would always give a lap of at least half the width of the implement. If we wished to go over the field three or four times, we would go each time in a different direction—lengthwise the furrow, crosswise, and diagonally. In this way, the pulverization would be more effectually performed. "Serpentine harrowing" is sometimes practiced in Germany—the team is driven across each land and back, making a line resembling the letter S, or two figures of 8 place one under the other.

The action of the harrow tends to consolidate as well as to pulverize the soil; and after plowing, it needs something of the kind to fit it for the best growth of plants. This is best performed with a good harrow—a poor one injures rather than benefits the soil. Let us look to this branch of practical tillage, that we perform it well.

J. H. B.

## LETTER FROM MINNESOTA.

WE make the following extracts from an interesting letter received last December, from Michael Wagner, of St. Peters, Minn. After stating that they had a great drouth last summer, he goes on to show that good crops were obtained notwithstanding:

"Our main crop is Spring wheat. I have finished sowing the last two years by I think the 20th of April; don't lime our sod; sow one and a half to two bushels to the acre—generally two bushels; scatter by hand and cover with harrow; had 76 acres in wheat this year; measured from threshing machine 1,552 bushels, now worth here 75 cents per bushel.

"Corn is our next crop in importance. We don't manure. We raise the yellow dent. In '62 I had 40 bushels to the acre on a field of 26 acres. In '63 had quite that of white dent which ripened, but the yellow did not; the frost caught it. In '64 had 40



bushels per acre in a field of 20 acres. Corn is worth here now 75 cents per bushel. I will now give the figures of a better corn raiser than myself. Chas. Snyder, from your State and a perfectly reliable man, is my neighbor. He has raised corn as part of his crop. Has used some manure, but it was just as time happened to allow—no rule. Snyder says, 'Since 1857, I have not raised less than 60 bushels of corn per acre till last year, when I had 40. I have had as high as 80. I have raised corn in New York, in Cortland, and I know we can beat them all to pieces.'

"Oats are an important crop with us of late years. We find they do better on Spring plowing. They are now worth 75 cents per bushel, the same price as wheat. I sold my oats from the threshing machine for 80 cents. Wheat was then worth 60 cents. Threshed and sold one lot of 20 acres, weighed 1,088 bushels, of 32 lbs. per bushel. Last year my oats were a failure. Did not bind at all. Sowed on fall plowing, on high, dry and sandy land. If I had put them in with a drill I would have made the price of half a dozen drills. In '62 the Indian raid created a horde of foragers. My oats suffered. What was untouched threshed 60 bushels per acre.

"Barley I tried once, four years ago, and did not like it; got 140 bushels from 8. It has been high in the West for two years, and like gold, getting higher, so I thought I'd try some this year. Put in 30 bushels in 15 acres of my best land. Fall plowed, and got 197. Here, too, a drill would have paid. For broadcasting, the seed was insufficient; with a drill, 'twould be enough. Rye we do not raise. Buckwheat we do not like to see. Sorghum we have come to consider as indispensable; we use no other molasses. I had 86 gallons off an acre. Drouth retarded its starting, and weeds did their best, but we got half a crop. We used an iron mill, horizontal rollers, and Cook's Evaporator. Ten farmers of us here bought the machinery jointly. I remember reading an inquiry lately in the New York *Tribune's* report of the American Institute Farmers' Club, 'How far north will Sorghum grow; will it grow as far north as 42°?' We are here at 44° north, and my neighbor Snyder, already mentioned, cut ripe seed from cane, and made 20 gallons of good molasses, or syrup, on the 20th day of August. That's pretty plain, and easy to understand. I know there has been 3,000 gallons made in this vicinity. Some of the stores keep no other for sale.

"Timothy, Clover and the grasses we have done scarcely anything with; have not tried seriously. The various roots we raise successfully—particularly the potato—in which line we will run up close to old Ireland. By the way, I want to say that I have

no objection to the 'whole world and the rest of mankind' making all they can out of my experience, but if there is a class that I would benefit, it is the Irish. The process is simple, such of them as have the ambition and the *energy* to work up to it—become American farmers."

#### FEEDING GRAIN TO SHEEP.

EDS. GENESEE FARMER: I write a few lines in regard to the graining of sheep during the foddering season; I think many farmers err in respect to this one essential point in keeping sheep. We will suppose a flock of sheep to be in good condition when winter commences; they are fed regularly with hay, minus the grain, until the *latter part* of winter, when the eye of the feeder notices his flock are losing flesh; he then commences to feed grain daily, the extra feed going towards the formation of flesh or fat more than the growth of wool.

Now I claim sheep should be grained from the time they are yarded until let out to pasture in the spring. The feed of grain should be small in quantity when commencing, and gradually increased until mid-winter, then decreased as spring advances. Sheep fed in this way, with occasionally a change of food, will be as fat and plump in spring as when put up to winter, and the heavy fleeces at shearing will well repay for time and extra expense. I know this to be true by experience, having had the care and management of sheep for a number of years.

I would like to make a few remarks in regard to troughs for feeding grain. I consider the flat-bottomed ones decidedly the best, as they give the sheep a better chance to get equally their portion of grain, whereas in the V-shaped troughs they eat so fast some are choked, the stronger ones getting more than their share, it being gulped down without masticating but little; these difficulties are in a great degree obviated in using the box troughs.

Berlin, January, 1865.

FRANKLIN WIGGINS.

REMARKS.—This interesting article was written for the February number of the *Farmer*, but arrived too late. Our correspondents would oblige us by forwarding their communications early in the month.

We think Mr. Wiggins is correct in regard to feeding grain to sheep early in the winter. With plenty of good hay, store sheep can be wintered without much grain, but where the principal feed is straw, pea and bean vines, &c., they need a little grain, and it is especially important that this should be given early in the winter. Too many farmers err in not feeding grain till the sheep manifest signs of losing ground.—EDS.

BLISTERED FEET.—Before putting on your stockings, turn them inside out and rub a little brown soap well into the threads.





### THE VALUE OF WINTER PEARS.

Is there any one of our readers who has an orchard of fine varieties of winter pears? If there be, we would advise him to send his fruit to the New York market without delay. We have just received a letter from a gentleman, who says:—"We have been sending a few bushels of Lawrence and Buerre Gris d' Hiver pears to New York; the former brought *sixteen dollars* and the latter *twenty dollars* per bushel, and sold to dealers at that." Will it pay to grow winter pears for market at such prices? What would be the revenue from ten acres of bearing trees? We plant standard pear trees twenty feet apart each way, ten acres would contain over a thousand trees. Surely a tree would soon be large enough to yield a bushel of pears, and that would be enough to make the orchard produce from sixteen thousand to twenty thousand dollars. What would such an orchard be worth per acre? If any thing like such prices can be maintained for winter pears, the man who has the soil suitable for their growth, in the right climate, and will inform himself how to grow them, need not ask what he shall plant. The fruit referred to in the letter quoted above was grown near Rochester, N. Y., and surely we have in Canada, climate and soil as favorable as that in the vicinity of Rochester.—*Canada Farmer*.

This is the same old story. It has been repeated a score of times during the last ten or a dozen years. The only difference is that it is not big enough! Why not make the calculation on *dwarf* trees? This was formerly the case. It does not take a very large dwarf tree to bear a bushel of pears. Then they can be set 12 feet apart. This would give 362 trees on an acre. Ten acres would, therefore, produce 3,620 bushels of pears, which, at \$16 per bushel, (not to say \$20,) would bring \$58,920 a year!

Do you doubt, reader? Is there any error in the figures? Figures will not lie. A bushel to the tree is not a large estimate. Two bushels are frequently obtained. Then winter pears can be barreled up and kept as easily as winter apples. The pears can be readily sold. There is no danger of glutting the market. Experience has certainly demonstrated this fact! How blind and ignorant farmers are! Why will they go on trying to raise wheat, at a profit of not to exceed \$10 or \$15 per acre, while they might just as easily grow pears, at a profit of not less than \$5,000 per acre! Even if the price of pears should fall one-half, which is not likely, but

admitting, for the sake of argument, that such should be the case, we should still have a profit of over \$2,000 per acre per annum! Why will you continue to raise wheat? Think of the labor required, and the risks you run. It is no easy matter to get the land well prepared for the seed, and when it is in the ground, the wire worm may destroy it, or the Hessian fly deposit its eggs in the young plants; or if it escapes them, it is liable to winter-kill. But should it pass this ordeal, wet weather or severe winds in spring may injure it. A dry, hot summer may burn it up; or should the season be moist, it runs a great risk of rust or mildew, while the midge is almost certain to eat half the grain. Then we may have bad harvest weather, or it may ripen up so rapidly that half of it will shell before it can be cut and gathered. And after all, should none of these evils befall it, what a paltry price it brings! How small are the profits! Suppose the whole amount that you get for the wheat was profit, it would be *nothing*, compared to the profit from an acre of pears! And then you cannot raise wheat on the same land oftener than once in three or four years, and you have to be at the same labor and expense for each crop, while the pears are on the land year after year, and increase annually in productiveness and profit.

But seriously, is it not time to stop such talk. We have no doubt that there are in some sections of Canada West "climate and soil as favorable as that in the vicinity of Rochester, but where, in the vicinity of Rochester or elsewhere, have such results been obtained as our Canadian cotemporary would lead its readers to suppose attainable?

We think pears can be grown with profit. But hitherto, where one orchard has succeeded ten have failed. We write this in sight of an orchard of dwarf pears, set out seven or eight years ago, that is to-day an eye-sore on the farm. It has not paid one dollar. The man who set it out doubtless expected to realize more from this acre than from all the rest of the farm. But the fruit spotted and cracked, and is utterly unsaleable. "Oh," you say, "he probably set out Virgalieu, and we all know that they are liable to crack. Had he set out Louise Bonne de Jersey, or Duchesse d' Angouleme, the result would have been different." True, but there is no proof that these varieties will not be affected by this or a similar disease. One thing is certain: Pear-culture, in this section, has not proved as profitable as was anticipated. We think those farmers who have confined their attention to ordinary crops have made more money—and will make more—than those who have been tempted by such extravagant statements as those made above to go into the cultivation of pears.



## LICE ON PEACH TREES—AGAIN.

EDS. GENESEE FARMER: Mr. E. D. Wright, in the January number of the *Farmer*, in his reply to my article in the August number, has been under the same mistake that many others have, as to the object and effect of the ants, on trees affected with Aphides. I shall not attempt to correct his error, deeming your "remarks" and quotations from Fitch to be sufficient; but I will endeavor to correct another error in relation to the ant, less excusable than his. Several persons who have purchased trees of me have complained that their trees did not do well, from being infested with ants. My reply to them has been, "examine the under side of the new leaves of your trees, and you will see another cause for their mean appearance; and if you will examine both insects with a magnifying glass for some length of time, (as I have by the hour,) you will see that the ants do no harm to your trees, unless it be to prevent other insects from destroying the lice on them." After writing the article alluded to in the August number, I found a few lice on my apple and cherry trees, but they soon disappeared, and did but little harm.

And now let us examine this matter a little further, for it concerns every person, more or less, who cherishes young trees. Mr. Wright says, "I have heretofore washed my trees with soap"—"and not perceived that it made any difference." By reference to my article above referred to, he will see that I have done the same, with like effect. Was not our error, friend Wright, in the fact that we applied the soap to *kill* the lice, rather than to *prevent* them? If I recollect aright, Mr. Fitch says that the eggs which produce these lice are laid in the crevices of the rough bark along the body of the tree, and hatch out in May. Now please read the article signed "L. L. F.," page 30, January number of *Farmer*, '65, and you will see that the writer, like me, and perhaps yourself, was not successful till he washed his trees in the spring, thereby probably destroying the eggs. I am now more than ever confirmed in the opinion, that strong soap-suds applied to the trunk, (and larger branches, if they have enough bark,) is an effectual remedy.

And now a few words on the louse, which I believe infests *everybody's* currant bushes. There is on these shrubs a very fine place for the deposit of eggs, and though Dr. Fitch has not, to my knowledge, mentioned this pest, it is to be suspected that they are propagated in the same manner as the others; and let us inaugurate a washing-day in the latter part of April next, and give them a benefit. What the great green fly is after, who occupies the upper side of the currant leaf infested with lice, but never touches the louse's side, I cannot imagine.

He seems to be afraid of me or my glass, and I cannot get near enough to him to scan his motives.

Muskegan, January, 1865.

S. B. P.

## TRAINING OSAGE ORANGE HEDGES.

MESSRS. OVERMAN & MANN, the well-known nurserymen of Bloomington, Ill., have for some years paid particular attention to the planting of Osage Orange hedges. The *Prairie Farmer*, in an account of a recent visit to this nursery, says Mr. Overman seems inclined to discard the old method of cutting back the hedge yearly, in order to thicken it up at the bottom, and prefers to let it grow naturally for several years, say six to eight, without cutting back, then "plash" it, that is cut it partly off near the ground and lean it over in the direction of the row, to an angle of thirty degrees, thus forming a dense bottom, as the new shoots thrown out from the "plashed" spot will be numerous and spread out both ways. In order to get at the hedge to do this work it will have to be trimmed up at the sides. Concerning a machine to trim with, Mr. O. did not know of a successful one; had seen one tried the past season that promised well, if it could be guided. It was composed of a large wheel, say six feet in diameter, with four knives or blades extending from its periphery. This was attached to a frame on wheels, so as to stand vertically by the side of the hedge, and revolved as the carriage advanced, cutting upwards. The trouble seemed to arise from the difficulty in governing it with the row; also from the irregularity of the surface of the ground, in keeping it up to its work; if the ground along the row were nicely graded and sodded, we think this might become practical. We can hardly expect, however, to ever have grounds kept even enough to regulate the cutting, and some contrivance must be resorted to by knuckle joint in the shaft, or otherwise, for the operator to keep the wheel to its work.

One of the advantages of plashing is that it affords an opportunity of filling up any gaps that may have occurred from the failure of the plants. Another is that a hedge is obtained sooner by allowing the plants to grow for a few years without trimming. The objection to it is the additional expense of plashing. It is an unpleasant operation, and few men know how to perform it.

PROTECTING PEACH TREES FROM THE SUN IN WINTER.—Albert Miller, of Waupacca county, Wisconsin, in a recent letter to the *Genesee Farmer*, alludes to some peach trees which flowered in that cold climate. They are on the south side of the house, and the owner sets boards on the south side of the trees to protect them from the sun in winter, which would otherwise kill them.



## GARDEN WORK FOR MARCH.

**MANURES.**—I consider the autumn the better time for applying manure to the garden, and I recommended it in the October number of the *Farmer*, but if neglected then, it should be got on as soon as possible now, that it may become dissolved, and distributed through the soil before the heat and drouth of summer. Our chief reliance for manure are the excrements of domestic animals and decayed vegetable matter. The ordure of animals differs in a great degree in its fertilizing properties, owing to the richness of the food they consume, and also to the habits of the animal. The excrements of the same animal fed on grain or oil-meal is worth a great deal more than if fed on hay, grass, or vegetables, and the droppings of *poultry* contain their solid and liquid excrements combined, and are therefore richer than those of other animals which separate those elements.

Guano is a powerful fertilizer, not only because it is the excrement of birds, but also because those birds subsist on fish, making their ordure rich both in nitrogen and phosphate of lime.

Every economical farmer will make the most of his poultry manure. The floor of the hen-roost should be frequently strewn with loam, both to absorb and retain the more volatile portions of the manure, and to dilute or divide it, that it may not injure the vitality of the seeds or germs that it may come in contact with. Thus prepared, hen manure may be scattered broadcast over the garden on the light snows of March, or it may be kept and applied to garden crops in the *hill* or *drill*.

The excrements of *swine* are also rich in the pabulum of vegetables, and ranks, in my opinion, next to that of poultry.

Horse manure, owing to its heating qualities, is well adapted to forwarding vegetation, but in a dry season is liable to dry up and retard, rather than hasten the growth of plants. Heavy soils are often benefitted—mechanically, at least—by the application of coarse barn-yard manure, but for light soils it is desirable to have it pretty thoroughly decomposed.

**The Hot-Bed.**—The enterprising gardener will be unwilling to wait until the frost is out of the ground, and the genial sun and bland winds have prepared it for the reception of seeds, before he commences operations, and so he will anticipate the processes of nature, and have good sized plants ready to set out, as soon as he may do so without hazarding their destruction by frost or cold winds. This can be accomplished by means of the hot-bed. The hot-bed affords artificial heat to plants by fermenting manure, excludes frost, cold air and wind by means of a frame of plank, and admits the rays

of the sun through a covering of glass. It should be *prepared* this month, in the latitude of Rochester, and may be *sown* the latter part.

In a situation sheltered from cold, northerly winds, and having a clear, southern exposure, dig a pit—longest east and west—18 inches deep, 5 feet wide, and about 12 feet long. Make a frame of inch and a half plank—spruce or pine—to fit within the pit, rising two feet above the surface of the ground on the north or rear side, and one foot in front, making the joints tight by battening. Posts may be set at the corners, and the planks nailed thereto, or, what is better, the corners may be fastened together by hooks and staples, allowing the frame to be removed and placed under cover when not in use. Rafters two by three inches should be dove-tailed into the upper edges of the sides, for the sash to rest and slide upon. The sash should be fastened to the frame by means of wire hooks and staples—the hooks on the frame and the staples on the sash. The sash should be made of clear pine, one and one-fourth inches thick, six feet long, and wide enough to contain three rows of 7 by 9 glass, allowing the outsides to be three inches wide, the middle pieces one and one quarter inches. It would require eight lights to a row, allowing them to overlap one another half an inch, and twenty-four to a sash.

**Filling the Bed.**—To fill the bed, use horse manure, pretty full of litter, and slightly fermented. Fork it over several times to break up the lumps, and mix the coarser and finer parts together. Make up the bed regular and level, beating down the manure with the back of the fork, leaving it about 28 inches deep before settling. Put on the sash, and wait two or three days for the manure to commence heating, and then spread the loam on evenly over the surface, from four to six inches thick. The pit should have been dug in the fall, the loam sifted through a pretty fine sieve, and covered with straw so as to be ready for use before the ground thaws. Put on the sash again, and wait until the loam is warmed through before sowing the seed. Nail narrow strips of board on the inside of front and back, just above the loam, to support a plank to sustain the gardener while sowing and weeding the bed.

**Sowing Seeds.**—Brocoli, Cabbage, Cauliflower, Egg-Plant, Kohl-Rabi, Lettuce, and Peppers, are the varieties that it is advisable to sow in March. Use a thin strip of board, two inches wide, to mark the drills for the seeds, the finger for a drill, and the fingers to cover the seeds. All lumps should be pulverized and stones removed.

The hot-bed once started, must not be neglected. It will want covering in cold weather with mats, blankets, or straw. In warm, sunny days it will need airing, and at all times it will require frequent waterings with tepid water. Always water at the



close of day, that the water may soak into the loam before too much evaporate. Although the hot-bed requires constant watchfulness, a very few minutes labor each day will suffice to take care of it, except in planting and weeding.

*The Open Ground.*—There is nothing gained by working the ground too early, before it is dry, yet it is desirable to get some crops started just as early as it will possibly answer. If the spring is pretty early, the ground will be settled enough to sow lettuce, peas, onions, spinach, beets and radishes this month, as they will endure considerable frost without injury, and grow when the weather is quite cool.

*Lettuce.*—Sow Early Curled Silesia, and Ice Drum-head, in drills 15 inches apart and one inch deep.

*Peas.*—Sow Daniel O'Rourke, and Warner's Emperor, in drills 2½ inches deep and 3 feet apart, and Tom Thumb 15 inches apart. A little bone-dust, or other concentrated manure, strewn in the drills, will give them a vigorous start.

*Onions.*—Sow the various kinds of black seed in shallow drills 11 inches apart, cover slightly, and roll the surface. The ground cannot well be too rich for onions, provided always that the fertilizers be well decomposed.

*Potato Onions.*—Should be set in drills 1½ inches deep, 15 or 18 inches apart, and 8 inches in the row.

For Top-onion sets and onion pips, marks should be made 15 inches apart, and the sets or pips slightly pressed in, 6 inches apart. They do not require covering.

*Spinach.*—Sow the Round, or Summer variety, the same as lettuce.

*Beets.*—Sow Extra Early Turnip and Early Blood Turnip, in drills 1½ inches deep and 15 inches apart.

*Radishes.*—Sow in drills 1 inch deep, 11 inches apart, on sandy soil, Early Scarlet Turnip and Long Scarlet Short Top.

All seeds will germinate quicker if the soil is compressed more or less with a garden roller, or the back of the hoe, which can be pushed along, rapidly, over the rows.

P. C. R.

**GRAFTING THE GRAPE VINE.**—A correspondent of the *London Gardeners' Chronicle* says:

"It is highly probable that if the Muscat of Alexandria were grafted on the Sweetwater, an old, hardy, early, and healthy variety, but a comparatively weak grower, it would ripen its fruit a fortnight, three weeks, or a month earlier than when on its own roots. This for early forcing would be very advantageous; and till we get an early variety with Muscat flavor, such a plan as this, if found to answer the purpose, would be worth adopting."

A LIGHT, rich soil, abounding in vegetable mold, produces the *earliest* peas; but a strong loam, inclining to clay, yields the *largest* crop.

## POMOLOGISTS AND COMMON PEOPLE.

MR. MITCHELL, the author of "My Farm of Edgewood," has, in the January number of the *Horticulturist*, some plain and pleasant talk about the "easy" and scientific way of growing and eating fruit. We make some extracts from the article, which, though addressed to people who have small places near a city, will, we think, apply equally well to farmers who want a garden, but have not much time or money to give to its culture. He says:

"It is the aim of the horticulturist to push both land and plants to the last limit of their capacity—to establish new varieties—to provoke nature by incessant pinchings into some abnormal development; whereas the aim of the mass of suburban residents is to have a cheery array of flowers—good fruit and plenty of it, at the smallest possible cost. If indeed the latter have any hope of winning what they wish, without any care or cost whatever, they are grossly mistaken. Nature is a mistress that must be wooed with a will; and there is no mistress worth the having, that must not be wooed in the same way.

"But the distinction remains which I have laid down between the aims of the pomologists and of the quiet country liver. And I am strongly inclined to think that the former are a little too much disposed to sneer at the simple tastes of the latter. There is a sturdy professional pride that enters into this, for something. I have before now been thrown into the company of breeders of blooded stock who would not so much as notice the best native animals—no matter how tenderly cared for, or how assiduously combed down; and yet a good dish of cream most people relish, even if the name of the cow is not written in the herd-books. Of course that nice discrimination of taste which enables a man to detect the minute shades of difference in flavors, is a thing of growth and long culture, and every man is inclined to respect what has cost him long culture. But if I smack my lips over the old Hovey, or a mahogany colored Wilson, and stick by them, I do not know that the zealous pomologist has a right to condemn me utterly, because I do not root up my strawberry patches and plant Russell's Prolific or the Monitor in their place. It is even doubtful if extreme cultivation of taste does not do away with a great deal of that hearty gusto with which most men enjoy good fruit. The man who is all the summer through, turning some little tid-bit of flavor upon the tip of his tongue, and going off into fits of rumination upon the possible difference of flavor between a Crimson-Cone when watered from an oak tub, and a Crimson-Cone when watered from a chestnut tub, seems to me in a fair way of losing all the appreciable and honest enjoyment of fruit which he ever had in his life."



At the close of the article he says: "My advice to you" (who want good fruit with little trouble) "is to limit yourself, until you have felt your way, to some ten or a dozen of the best established varieties; don't be afraid of old things if they are good; if a gaunt Rhode Island Greening tree is struggling in your hedge row, trim it, scrape it, soap it, dig about it, pull away the turf from it, lime it, and then if you can keep up a fair fight against the bugs and the worms you will have fine fruit from it; if you can't, cut it down. If a veteran mossy pear tree is in your door-yard, groom it as you would a horse—just in from a summering in briary pastures—put scions of Bartlett's, of Winter Nelis, of Rostiezer, into its top and sides. In an unctuous spot of your garden, plant your dwarf Duchess, Bonne de Jersey, Beurre Diel, and your Glout Morceau. If either don't do well, pull it up and burn it; don't waste labor on a sickly young tree. Save some sheltered spot for a trellis, where you may plant a Delaware, an Iona or two, a Rebecca, and a Diana. Put a Concord at your south-side door—its rampant growth will cover your trellised porch in a pair of seasons; it will give you some fine clusters even though you allow it to tangle; the pomologists will laugh at you; but let them; you will have your shade and the wilderness of frolicksome tendrils, and at least a fair show of purple bunches. Scatter here and there hardy herbaceous flowers that shall care for themselves, and which the children may pluck with a will. Don't distress yourself if your half-acre of lawn shows some hummocks, or dandelions, or butter-cups. And if a wild clump of bushes intrude in a corner don't condemn it too hastily; it may be well to enliven it with an evergreen or two—to dig about it, and paint its edges with a few summer phloxes or roses. You will want neither Scotchman nor forcing houses for this."

**SITUATION FOR GRAPE VINES.**—A correspondent of the *Rural American* asks: "What is the best situation for grape vines; land which slopes to the north, south, east, or west, and what is the best manure for them?" and the editor answers:

"A southern slope is best for vineyards; but an eastern or western one will do very well. A northern slope is not suitable, except in a warm latitude. Bone-dust is the best fertilizer; but it is too expensive to be used extensively. Ashes are good, and next well-rotted barnyard manure, which is all that is needed in any case. If the soil is in good condition—a state that will produce a good crop of corn—no manure at all is needed for the first three years. Grape vines may be set in gardens, wherever the sun shines most or all of the day. It is not necessary to set them on the south side of a building, yet such places are best for the late-ripening varieties—as Diana, Union Village, &c.

#### PITMASTON DUCHESSE D'ANGOULEME PEAR.

THE Duchesse d'Angouleme, while not of as high quality as many other sorts, is so large and productive, and so free from spots and other diseases, that no variety of pear is more profitable for cultivation as a dwarf for market purposes. It is probably grown to a greater extent in the United States than any other variety, and it is annually becoming more and more popular.

The *London Gardeners' Chronicle*, of a recent date, figures and describes a seedling pear, said to be a cross between the Duchesse d'Angouleme and the Glout Morceau, the former an autumn and the latter a winter variety. It was raised by the late John Williams, Esq., of Pitmaston, in 1861, and is called the Pitmaston Duchesse d'Angouleme. It is a vigorous grower and free bearer, and in favorable circumstances will attain to great size. The editor of the *Gardeners' Chronicle* says it is "a handsome and most excellent pear. Ripe in the end of October, or in ordinary seasons it may probably be kept till the middle of November. Few of the new pears can compare with it as regards size, appearance and quality. It partakes more of the nature of Marie Louise than of the Glout Morceau. We regard it as quite an acquisition."

#### RABBITS VS. FRUIT TREES.

**EDS. GENESEE FARMER:**—In this section of Uncle Sam's plantation there are probably more fruit trees destroyed, or injured, by rabbits, than from all other causes combined, and anything to prevent their ravages is a desideratum to fruit growers. I have tried everything I could hear of, with more or less success—always having to replace yearly at least five trees out of every hundred in my pear orchard, besides having my apple orchard often much injured. Last fall I resolved to rely on my dog and gun. The result up to present writing (Jan. 18th) is not a tree injured—self and family fat on rabbit pie—four agricultural journals subscribed for from the funds arising from the sale of the surplus the family could not use—and a full determination to make the peelers pay for every agricultural journal published in the country, if they don't take the hint. A. N.

Manchester, Mo., 1865.

"A GOOD HOUSEWIFE," says, Pliny, "will go into her herb garden instead of a spice-shop for her seasoning, and thus preserve the health of her family by saving her purse."

**TOMATO PLANTS**, for early fruiting, may be raised very early by sowing a few seeds in a large flower-pot, or small box, in good light soil.



## Miscellaneous.

### A SUDBURY BALLAD.

WRITTEN BY THE WAYSIDE INN.

I asked a little child  
That wore black ribbons on her head,  
"Whom she was mourning for? She smiled,  
And mentioned that her aunt was dead.  
"Where did your aunt reside, my dear?"  
"Over in Marlboro'," she replied:  
"She had been feeble *more'n* a year,  
And last Thanksgiving-day she died;  
And she died o' the shocanum palsy."

My heart within me began to melt—  
A sudden tear-drop forced its way:  
"You say your aunt in Marlboro' dwelt,  
And died upon Thanksgiving-day;  
But what your aunt died *of*, my dear,  
I did not fully understand."  
"Well, she was sick about a year;  
She had the ring-worm on her hand,  
But she died o' the shocanum palsy."

"What sort of palsy, love?" said I—  
"That name I never heard before."  
This was my little maid's reply:  
"I've told you twice, and won't no more."  
"I prythee, sweetest, once again!  
What was it killed your suffering aunt?"  
She answered: "I will tell you, then,  
But if you ask again, I shan't:  
She died o' the shocanum palsy."

Happy condition! not to know  
More than the child of dying!  
Lamb-like to see your friend laid low  
Without a thought of sighing!  
This creature knew no more of grief  
But the black ribbon on her head,  
Nor aught of sickness: for, in brief,  
She only knew her aunt was dead,  
And died o' the shocanum palsy!

**ANSWERING A FOOL.**—There is an allegorical story current that once, immediately after Theodore Parker had parted from Ralph Waldo Emerson on the road to Boston, a crazy Millerite encountered Parker, and cried: "Sir, do you not know that the world is coming to an end?" Upon which Parker replied: "My good man, that doesn't concern me; I live in Boston." The same fanatic overtaking Emerson, announced in the same terms the approach of the end of the world; upon which Emerson replied: "I am glad of it, sir; man will get along much better without it!"

**OLD JOSHUA SWALLOW**, a veteran minister, was the other day at Clio preaching against the "spiritual eall" to the ministry, and related an anecdote of Caleb Jones, who gave his experience in this wise: "I was one day plowing, and was called to preach by a voice saying, 'Caleb! Caleb!' Who could have called me thus?" A boy in the back part of the congregation, says Mr. Swallow, exclaimed: "Maybe it was a bull-frog, Mr. Jones."

**THE** late Rev. Dr. Sutton, Vicar of Sheffield, once said to the late Mr. Peech, a veterinary surgeon: "Mr. Peech, how is it that you have not called upon me for your account?" "Oh," said Mr. Peech, "I never ask a gentleman for money." "Indeed!" said the vicar; "then how do you get on, if he don't pay?" "Why," replied Mr. Peech, "after a certain time I conclude that he is not a gentleman and then I ask him."

### AN ENTERPRISING AGENT.

AN enterprising traveling agent for a well-known Cleveland tombs-stone manufactory, made a visit to a small town in a neighboring county. Hearing in the village that a man in a remote part of the township had lost his wife, he thought he would go and see him and offer him consolation and a 'grave-stone, on his usual terms. He started; the road was a horribly frightful one, but the agent persevered and arrived at the bereaved man's house. The bereaved man's hired girl told the agent that the bereaved man was splitting fence-rails over in the pasture, about two miles. The indefatigable agent mounted his horse and started for the pasture. After falling into all manner of mud holes, scratching himself with briars, and tumbling over decayed logs, the agent found the bereaved man. In a subdued voice he asked the man if he had lost his wife. The man said he had. The agent was very sorry to hear it, and sympathized very deeply with the man in his great sorrow, but death, he said, was an insatiate archer, and shot down all of both high and low degree. He informed the man what "was his loss was her gain," and would be glad to sell him a grave-stone to mark the spot where the loved one slept, marble or common stone, as he chose, at prices defying competition. The bereaved man said there was a slight difficulty in the way. "Havn't you lost your wife?" inquired the agent. "Why, yes, I have," said the man, "but no grave-stone ain't necessary; for you see the cussed critter ain't dead; she scooted with another man!"

**TOBACCO** became fashionable through Sir Walter Raleigh, but by the caution he took in smoking it privately it is clear he did not wish to have the custom imitated. But sitting one day with a pipe in his mouth, he inadvertently called for some small beer. The fellow coming into the room threw all the liquor into his master's face, and running down stairs called out, "Help! help! Sir Walter has studied till his head is on fire, and the smoke bursts out of his mouth and nose."

**THE** latest fashionable freak noticeable on the drives of the Bois de Boulogne, Paris, probably suggested by the prevalent mania for ringlets colored red, is the rather novel phenomenon of ladies lapdogs similarly metamorphosed in a variety of fictitious tints. Green dogs, yellow dogs, and pugs sky-blue, are at present much in vogue.

A LATE French writer says that the Bostonians are much like his own countrymen, polite, courteous, and lovers of frogs, and that they have a pond in the middle of a public garden, which is kept for the purpose of supplying the city with these animals!

**ABSOLUTE** peremptory facts are bullies, and those who keep company with them are apt to get a bullying habit of mind.

**WHY** is a spider a good correspondent? Because he drops a line by every post.

**WHAT** was Eve made for? Adam's Express Company.



## Ladies' Department.

### HOME-MADE WINES.

THESE manufactures are a great hobby with many amiable housewives, and the commotion the brewing excites in the household exceeds that of any other annual domestic operation. Many attempts in this department are perfect failures. It is amusing to notice the variety of articles from which the "home-made" are produced. They comprise almost every fruit, flower or root that is grown. We have the green and ripe gooseberry, red and white currant, elderberry, quince, cherry, mulberry, sloe, orleans plum, blackberry, strawberry, barberry, raspberry, primrose, cowslip, beet-root, parsnep, turnip, and many others. The most extraordinary production of the kind we ever met with, or heard of, we have yet to mention. A very worthy old lady prided herself upon her manufacture of these wines, candidly confessing, however, that she never tasted them herself, as they disagreed with her. She was fond of making experiments upon new materials, and on one occasion brought forward a dark, inky-looking liquid, which we were informed was a new discovery. We prudently were satisfied with its appearance and smell, in which decomposition had evidently been going on, at a rapid rate; but a friend was too polite to decline, and imbibed a portion of a glassful, and, but for the assistance of a medical man immediately after he left the house, he would probably have died from the effects of the poison. We were asked what we supposed this wine was made from? We pleaded ignorance, but speculated upon mushrooms. The old lady, however, informed us that it was real hock, for she had made it from *holly-hocks*!

DR. BEECHER'S NEW CARPET.—There was not a store in town, and all our purchases were made in the city of New York by a small schooner that ran once a week. We had no carpets; there was not a carpet from end to end of the town. All had sanded floors, some of them worn through. Your mother introduced the first carpet. Uncle Lot gave me some money, and I had an itch to spend it. Went to a vender and bought a ball of cotton. She spun it and had it woven; then she laid it down, sized it, and painted it in oils, with a border all around it, and bunches of roses and other flowers over the center. She sent to New York for her colors, and ground and mixed them herself. The carpet was nailed down on the garret floor, and she used to go up there and paint. She also took some common wooden chairs, and painted them, and cut out figures of gilt paper and glued them on and varnished them. They were really quite pretty. \* \* \* Old Deacon Tallmadge came to see me. He stopped at the parlor door and seemed afraid to come in. "Why, I can't," said he, "'thout steppin' on't." Then, after surveying it awhile in admiration, "D'ye think ye can have all that and heaven too?" Perhaps he thought we were getting too splendid, and feared we should make an idol of our fine things.—*Life of Dr. Lyman Beecher.*

### RECEIPT FOR GINGER SNAPS.

Of all the cakes one loves to eat, perhaps  
None charms the palate like good ginger snaps;  
And if to make the best you wish to know,  
Why, study well the rhymes you find below:  
Melt of butter half a pound, also of lard,  
Then add sugar, brown, a half a pound,  
Stir in a quart of molasses, not too hard,  
Four tablespoons of ginger, nicely ground.  
Into this mixture sift two quarts of flour,  
(Then to insure the cakes shall not be sour,)  
Dissolve in milk four teaspoonsful of soda—  
Saleratus is advised, but I like not the odor;  
Mix either with milk, it surely makes no matter  
So that you strain the milk into the batter;  
Add more flour, and roll out thin the dough,  
Then cut in cakes, but this you surely know.  
Bake them well in an oven, cooks call "slow,"  
And when they're baked they'll not last long I know.

SUPERIOR DRESSING FOR CHICKEN SALADS.—Beat the yolks of six eggs very light; pour over them a teacup of boiling vinegar and return to the saucepan, stirring it constantly for a few minutes; then set it away to cool. Rub a large tablespoonful of mustard with six spoonsful of oil; grate in half a potato; add a teaspoonful of salt and a little pepper; harden the whites by boiling the eggs; chop them up and scatter among the salad; then stir all together and pour over just before serving. Hear what Sidney Smith said of such a dish:

"Oh tempting banquet, most delicious treat,  
'Twould lure the dying anchorite to eat;  
Back to the world he'd turn his weary soul,  
And thrust his fingers in the salad bowl!"

[*German town Telegraph.*]

TURKEY SOUP.—The remnants of a young turkey make good soup. Put all the bones, and little bits left of a dinner, into about three quarts of water. If you have turkey gravy, or the remnants of chickens, add them also, and boil them two hours or more. Skim out the meat and bones, and set the water aside in a cool place till the next day. Then take all the fat from the top; take the bones and pieces of skin out from the meat and return it to the liquor. If some of the dressing has been left, put that in also, and boil all together a few minutes. If more seasoning is needed, add it to suit your taste.—*German town Telegraph.*

INDIAN BAKED PUDDING.—Take two quarts of sweet milk, and boil one quart, and while boiling stir in as much fine Indian meal as will make a very stiff batter; add a teaspoonful of salt, and make very sweet with molasses; butter a pan and pour the batter in, and pour the remaining quart of cold milk over it; cut little bits of butter and put on the top, and bake two hours in a moderate oven. Any person who has never ate of it before will think they are eating custard.—*German town Telegraph.*

GINGER SNAPS.—One teacup of lard, two of molasses, one tablespoonful of ginger, one tablespoonful of saleratus dissolved in as little hot water as possible. Cloves, cinnamon or mace to your taste. Flour enough to roll thin. L. P. S.

GINGER COOKIES WITHOUT EGGS.—Two cups of molasses, one of sugar, one of butter, a small teaspoonful of saleratus, a tablespoonful of ginger, and a cup of water. Flour enough to roll out.





OUR picture this month shows us several wise-looking personages reading over a petition. How calm and sedate the dignified Ox looks, and how cunning Reynard the Fox as they ponder the weighty words to which they are to sign their names. We have no doubt but that its main object is to get help against wrongs done them by man.

Suppose all the cows, and horses, and dogs, and cats, and pigs, and turkeys, and hens, and ducks on a farm could get up a petition to the King of all the animals against their enemies, how would our young readers be mentioned? Did you ever think when you tied a tin pan to the dog's tail, when you frightened the cat by setting "Tiger" on her, and when you struck the cows as you drove them home from pasture, or whipped some poor horse to see how fast you could make him go, that God sees you, and that all these animals were His creatures, and that He loved them? Boys know as well as older people that if they intend to fight or abuse each other, they ought to choose one of their size, and that it is very mean for a big boy to strike a little one. The reason is that you do not give fair play. If you will indulge your passions, you must take the consequences. Now animals, strong as they are, can not very well resist even a small boy, but have to endure his hard blows in silence; and it is very mean and

contemptible to abuse this power which you have over them. If you wish to be loved, respected—for a boy may win respect as well as an old man—and obeyed, be kind and gentle to all living things. Teach the little colts to come and eat out of your hand. Pet the cows and horses so that they will know you. If you are too little for such large pets, feed the chickens and teach them to come at your call. Make the dog love you; never let him be afraid of you. Animals know by the tone of your voice whether you like them or not, and will soon learn to come to you with pleasure if you always speak to them gently and kindly. Remember that great gentleness is one natural consequence of great strength and wisdom. Idiots and fools are almost always harsh and cruel.

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WHAT did the feather, when it first sprouted, say to the duck? I'm down on you this time.

---

WHY is a man with a cork leg never likely to be forgotten? Because he is re-membered?

---

WHY is John Bigger's boy larger than his father? Because he is a little Bigger.

---

WHY is spermaceti like a busybody? Because it makes scandals.





### The Markets.

SINCE our market report for last month, Savannah, Columbia, Charleston and Wilmington have fallen into our hands. Our military prospects were never so bright, and yet, as compared to gold, our paper money has only advanced some 5 or 6 cents on the dollar. This can be accounted for only on the ground that the premium on gold is caused by the redundancy of the currency, and not by fears in regard to our military prospects. The fact is, that we have nearly \$900,000,000 of money in circulation, while \$400,000,000 is all that is needed to carry on the business of the country on a specie basis. As long as this state of things continues, there is little prospect of gold falling permanently below 200.

The price of most articles of farm produce has a drooping tendency, though there is little change since our last report. The wool market is more active at the East, but prices have given way somewhat. There is a general opinion that potatoes will be lower when navigation opens. There can no longer be any doubt that the crop last year was an unusually abundant one in the Eastern and Middle States; but it was comparatively a failure at the West, and it is not improbable that prices will be sustained.

The supply of good butter in New York is unprecedentedly light. Our exports to England have fallen off materially. From May 1, 1862, to February 13, 1863, they were 25,089,700 lbs.; from May 1, 1863, to February 13, 1864, they were 17,200,000 lbs.; and from May 1, 1864, to February 13, 1865, 10,307,000 lbs.

It will be seen that our exports of butter are 41 ¢ cent. less than during the same period a year ago, and 60 ¢ cent. less than two years ago. This falling off may be owing to a deficiency in the produce of butter, or to a disposition on the part of producers and speculators to hold it for higher prices. If the latter, it is probable that prices will be lower, for with gold at 200 none can be exported with profit till prices here give way.

The same remarks apply to clover seed. It can not be exported with profit at the present prices. The crop here was very deficient last season, and the home demand may be greater than the supply, and in that case prices will advance; but if the price is determined by the price abroad, it would seem difficult to keep up the price here, unless gold should advance.

The New York cattle market, the second week in February, was the highest ever before known. Extra or premium beef sold for 26@28c. ¢ lb., estimated dressed weight—equal to about 18c. ¢ lb. live weight! The poorest quality brought 14@15c.; and the average of all sales was 20c. ¢ lb.!

The following week brought a large supply, and prices fell from 2 to 3 cents ¢ lb. from the extreme rates of the previous week. The range was from 12 to 25 cents ¢ lb.

The demand for milch cows is increasing. Prices range from \$100 to \$120 for extras; \$80@90 for good; \$70@80 for medium to poor.

Veal calves bring from 11@15c. ¢ lb. live weight, according to quality.

Sheep are in more demand, good sheep selling quick at 14c. ¢ lb. live weight! poor, 11c.; common to medium, 12@13c. ¢ lb.

Hogs bring from 14 to 15c. ¢ lb. live weight, or from 18@19c. dressed.

Those who have any fat cattle, sheep or hogs to sell are fortunate!

### Bound Volumes of the Genesee Farmer and Rural Annual.

THE last six volumes of the *Genesee Farmer* (1859-'60, '61-'62-'63-'64,) substantially bound in six volumes, with complete index, &c., will be sent by express to any address on receipt of five dollars!

The *Rural Annual and Horticultural Directory* for 1856-7-8-9-'60-'61-'62 and '63, bound in two volumes, will be sent prepaid by mail to any address on receipt of \$2.50; or the six volumes of the *Farmer* and the set of the *Rural Annual* will be sent by express together for \$7.00!

Those of our readers who have not these volumes should lose no time in securing them. They can not now be printed for the money. They will be sold at these rates as long as the present supply lasts. When we come to reprint, we shall be compelled to double the price. Order at once.

### List of Nurserymen and Agricultural Implement Manufacturers.

THE *Rural Annual and Horticultural Directory* for 1865 contains a carefully prepared list of nurserymen and agricultural implement manufacturers, seedsmen, &c., in the United States and Canada. It was prepared especially for the *Rural Annual*, and is undoubtedly the most complete list yet published. This number of the *Rural Annual* is sent to any address on receipt of twenty-five cents.

### Cheap Farm for Sale.

THE publisher of the *Genesee Farmer* has a farm of one hundred and ten acres, half a mile from the village of Van Etenville, in Chemung county, N. Y., that he is anxious to dispose of. It is excellent land, but the farm has been rented out for some years, and is in poor order. It will be sold for \$2,500. It is a rare chance to buy a cheap farm.

MR. O. PERKINS, of Durant, Cedar county, Iowa, writes: "While in your vicinity you have had so much snow, we here in Iowa have had scarcely enough to cover the ground. Farmers raised large quantities of corn last year, and took their leisure in picking it. The price has rated low—40@55c. per bushel in Durant."



## Inquiries and Answers.

I WISH to know if filberts will succeed in this climate ( $44\frac{1}{2}^{\circ}$  north latitude), and how large the trees will grow. I see them advertised in nursery catalogues. (a)

I saw advertised, last fall, the Cape Cod cranberry for upland and garden cultivation, and bought a few; also the Cherry, Bugle and Bell varieties. Do you think that one kind will grow on upland any better than the others? (b)

What is the best breed of hens for a farmer? (c)

What is the earliest summer apple? (d)

What is the hardiest grape? (e)—ALBERT MILLERD, Waupaca county, Wis.

(a) We think your climate is too severe for filberts.

(b) We have had no experience in growing cranberries; but believe that it is generally admitted that what is called the "Upland" or "Cape Cod Bell" is the best variety for upland culture. Mr. Sullivan Bates, of Bellingham, Mass., one of the earliest pioneers in upland cranberry culture, says that the Cherry variety will also succeed on moderately moist upland soils, but it is generally grown on wet land.

(c) Perhaps all things considered the Dominique is the best breed of fowls for ordinary farm treatment.

(d) For cooking, the Keswick Codling is the earliest apple we are acquainted with. It makes excellent tarts the latter part of June, but does not ripen until September. The Early Harvest is one of the best and earliest of dessert apples.

(e) Difficult to say, if you have any regard to quality. The Delaware is perhaps the hardiest of good grapes.

#### WHAT IS THE PRICE OF CLOVER SEED IN ENGLAND?

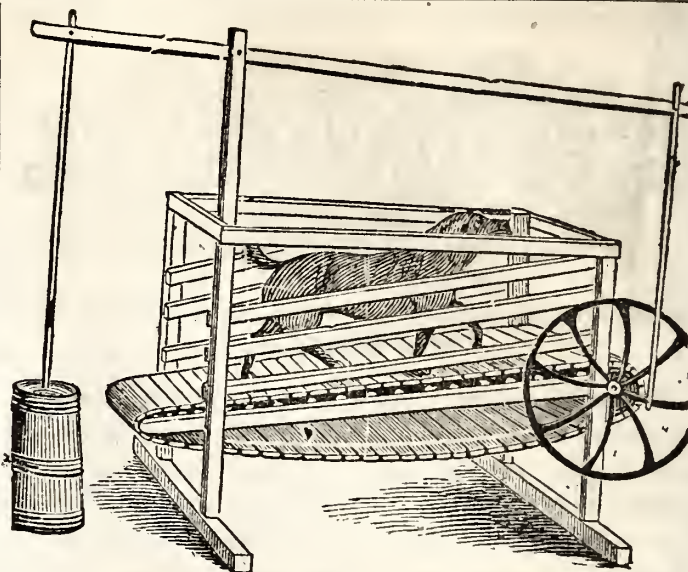
(S. A.) The *Mark Lane Express* quotes American red clover seed at £2 8s. to £2 10s. per cwt. (112 lbs.) This is  $10\frac{1}{4}$  to  $10\frac{3}{4}$  cents per lb. in gold; and \$6.25 to \$6.75 per bushel of 60 lbs. In New York it is quoted at  $24\frac{1}{2}$  @ 25 cents per lb., "mainly for export." With gold at 220,  $10\frac{3}{4}$  cents is equal to  $23\frac{1}{2}$  cents; so that really clover seed is higher, in gold, in New York than in London. Those who pay present prices in New York, with the intention of exporting it, must expect gold to advance in this country, or clover seed to advance in England. Should neither of these things take place they will lose money by buying clover seed at present prices.

AMMONIA IN MUCK.—I learn from the *Rural Annual* for 1864 that muck contains ammonia in more or less abundance. Will you please answer in the *Genesee Farmer* the following questions: What is the source of ammonia as contained in muck, and what descriptions of muck are likely to contain the greatest quantity?—ALBERT PEASE, *Phillips, Me.*

The source of ammonia in muck is doubtless the plants, leaves, &c., of which muck is originally formed. As to what descriptions of muck are most likely to contain the most ammonia we are unable to say. Perhaps Prof. S. W. Johnson, who has investigated this matter more thoroughly than any other chemist, will favor us with his opinion on this important subject.

BALD SPRING WHEAT.—Can you tell me where I can get a few bushels of bald spring wheat? I have seen it in this vicinity, but can not get it now.—ANSEL BARTON, *Randolph Center, Broome county, N. Y.*

Perhaps some of our readers can furnish Mr. B. with what he wants.



POWER FOR CHURNING.—(W. S.) Unless you have a very large dairy, the only power that can be profitably used in churning is the endless-chain dog-power, represented in the above engraving. We do not know where they are manufactured, but presume they can be obtained from any of the leading dealers in agricultural implements.

SPRING WHEAT WANTED.—As you live in a wheat growing section, can you tell me if there is any spring wheat raised in the Genesee Valley? If so, please inform me of whom I can obtain some seed. I would also like some Genesee white wheat.—DANIEL W. SAMPREL, *Northumberland, Pa.*

Spring wheat is not raised to any considerable extent in this section. At the Wheat Show held in this city in 1863, the only entry of spring wheat was sent by T. W. Arnold, of Cortland, Ill. It was a splendid sample. Perhaps Mr. A. could furnish you with a few bushels for seed.

The old Genesee white wheat is not now raised in this section. Our best variety of white winter wheat is the Soules. You will have no difficulty in procuring all you want for fall sowing.

CULTIVATION OF CRANBERRIES.—I lost an arm in the army, and am compelled to seek such work as I am able to do better than plowing and raising grain. I have a piece of ground which, according to the accounts I have seen in the papers, is well suited to the cranberry. It is a low swamp, mostly muck, and which I can keep under water till late in the spring. Now what I want is practical information from those who have had experience in cultivating cranberries. Will it do to set out the vines in the spring? Can we raise them from seed? Will it pay to grow cranberries? What are the great difficulties in their cultivation? What is the average yield per acre?—DANIEL GERMAN, *Coesse, Whitney county, Ind.*

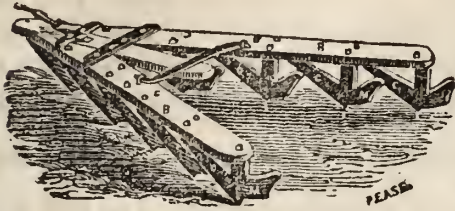
We should be glad if some of our readers would answer the above. A man who has lost his arm in the defence of his country is entitled to all the encouragement which can be given him.

PRUNING GRAPES.—I wish you would give the necessary directions for pruning grapes planted last spring—renewal system.—J. M. CARSON, *Cambridge, Ohio.*

The main object now must be to obtain strong shoots for side arms. If your vines are strong, these can both be grown this season by cutting the vine low and allowing two shoots only to grow; but if the vines are weak, it must be deferred another year, and this season only one cane allowed to grow from the bottom.



**SHARES' HARROW.**—Last year, in your interesting "Walks and Talks on the Farm," you spoke of Shares' Harrow, recommending it highly. I would like to know more about it—where it is manufactured, price, &c.—A YOUNG FARMER.



Shares' Harrow is an excellent implement for pulverizing recently inverted sod land.

The teeth are sharp, flat blades, so arranged as to cut up the soil without inverting the sod. The accompanying cut of it will give you a better idea of the implement than the minutest description. We do not know where it is now manufactured.

**GALLOWAY CATTLE.**—(A Subscriber, Plymouth, Conn.) Mr. John Snell, of Edmonton, C. W., has some excellent Galloway cattle. The Galloways were introduced into Canada about a dozen years ago. At the last Provincial Fair at Hamilton there were over seventy entries of Galloway cattle—a fact which indicates how rapidly they have been disseminated. They are becoming quite popular in Canada.

**HOT WATER TANKS.**—Would you be kind enough to inform me through the columns of your valuable paper, whether or not there are any green or hot-houses in or around Rochester heated by hot water tanks; and if so with what success. I see the system recommended in Leuehar's work on green and hot-houses. Do you know if it is a good system? Being about to erect a house for the purpose of raising salads, &c., in the winter season, any information from you or any of your correspondents respecting the heating of such a structure would be thankfully received.—PHILIP GILES, *Peterboro', C. W.*

H. E. Hooker, of this city, has a house heated in this way which is every way satisfactory.

Will you be kind enough to inform me where I can procure the best work on farm buildings, as I wish to build a good sized farm-house with barns, sheds, and all out-buildings necessary for the protection of grain, cattle, sheep, hogs, &c.—R. B. WHITEHOUSE, *Eau Claire.*

*Allen's Rural Architecture* will give you some useful suggestions. Books have advanced so much of late that we do not know the price. You can get it from William Wood & Co., New York.

**BEANS FOR SHEEP.**—Are beans profitable to feed sheep to fatten them? It is acknowledged that they are excellent feed for store sheep, but some of the best farmers here state positively from experience that they will not cause sheep to fatten as readily as other kinds of grain.—SELDEN D. REDMAN, *Newfane, N. Y.*

For fattening sheep we should prefer to feed corn with the beans—say half beans and half corn.

**CLOVER TO ENRICH LAND.**—How often should a good clay loam be sown to clover to keep up productive-ness?—W. P. REYNOLDS, *Bloomington, Ind.*

We think no definite answer can be given to this question. We should like to have clover once in four years. Will some of our correspondents give their views on the subject?

**STEALING BEE-HIVES.**—Can you or your readers give me information as to the best plan for securing bee-hives to prevent them from being carried off bodily by thieves?—J. C. ADAMS, *Seymour, N. Y.*

**GARNET CHILI POTATO.**—(D. B.) The Garnet Chili is one of the best of the many seedlings raised by the late Rev. C. E. Goodrich, of Utica, N. Y. It is a late variety, of good quality, and very productive. The "Early Goodrich" is one of the best of his early sorts. We do not know who has these varieties to sell, though you will have no difficulty in obtaining them before spring.

**ARE NATIVE COWS BETTER THAN THE IMPROVED BREEDS?**—Can some one explain Mr. Mattoon's resolution? (See February number *Genesee Farmer*, page 53.) In preferring native cows, does he mean that poor milk makes the best cheese? Or does he mean that factories can make better cheese out of poor milk than private dairies can make out of good? Or does he mean that native cows give better milk than the improved breeds—Devon, Durham, Shorthorns, &c.? Now I always supposed that, all things being equal, richer milk makes richer cheese, and that the milk of native cows would not average near as good as the Devonshire or other improved breeds. This trying to make cheese equal to Cheddar, from second quality milk, looks to me like advancing backwards.—P. F., JR.

**HAND GRIST MILL.**—(A. Barton.) We do not know where the hand grist mill is manufactured. If any of our readers do, they would oblige us by furnishing the information, together with its cost, efficiency, &c.

#### Artificial Manures.

WE would call the attention of those wishing artificial manures to the advertising department. We believe there is no manure advertised in the *Farmer* that, if judiciously used, will not prove profitable, as long as produce brings the present high prices. In the garden especially superphosphate and other artificial manures are invaluable. Write to the different manufacturers, and get their circulars, and then judge for yourself which you think will suit your ease. Order early, or you may find, as we did last spring, that you may not be able to obtain them in season. A farmer or gardener who has never used artificial manures, does not live up to his privileges. For onions, tomatoes, cabbages, melons, cucumbers, lettuce, peas, turnips, &c., they will pay double and treble. At the present time, too, we think they will pay well on ordinary farm crops.

#### Engraving.

WE would call the attention of our readers to the advertisement, on page 101, of Mr. C. T. Leadley, designer and engraver on wood. He has recently returned from New York, where he obtained a thorough knowledge of this branch of art, having been in the employ of some of the first artists and engravers in the country. Some of his specimens are self-evidence of his ability, and we cheerfully recommend him to all wishing any thing in his line.

#### Frost & Co.'s Nurseries.

WE would call attention to the advertisement on another page of this well-known nursery firm. Those must be hard to please who can not find just what they want for orchard, garden, ornamental grounds or green-houses in this well conducted establishment.



**Literary Notices.**

**OUR YOUNG FOLKS: An Illustrated Magazine for Boys and Girls.** Boston. TICKNOR & FIELDS. January, 1865. \$2.00 a year.

This new monthly is a real acquisition. We wish we were young again, that we might have the full enjoyment of this charming periodical. We have to confess, though, that notwithstanding the weight of years, we have enjoyed all the articles, and the real old-fashioned fairy story of "Thumbling" as much as any of them. "Hum the Son of Buzz," by Mrs. Stowe, is an exquisite little thing. "Gail Hamilton" has a pretty fable called "The Red Wats." Mayne Ried has commenced a story for boys which promises adventure enough to please the most requiring. "Carleton's" tale, "Winning his Way," is exceedingly pleasant reading. The hero is a truth-telling, honest, fun-loving boy, and his various practical jokes and amusements are well told. We hope to continue his acquaintance up to manhood. The author of "Ten Acres Enough" gives No. 1 of a series of articles with the title of "Farming for Boys," telling them "what they have done and what others may do in the cultivation of farm and garden—how to begin, how to proceed, and what to aim at."

The young folks themselves are the true critics on their own periodical, but we are certain that the old folks who provide their reading will be exceedingly pleased to have a magazine so well published and so well edited as this, to give them.

The second number is equal, if not superior, to the first. In addition to the regular contributions from Mrs. Stowe, "Gail Hamilton," Mayne Ried, "Carlton," and others, a story by Rose Terry, a sketch called the "Baby of the Regiment," by Colonel T. W. Higginson, and a prose article by John G. Whittier, are given. The illustrations are beautiful in design and execution.

This magazine is for an older class of boys and girls than "Merry's Museum" is intended for, and will not interfere with the circulation of this long-established favorite of the children. Send ten cents to the publishers for a specimen copy. The club rates are very liberal.

**THE YOUNG HOUSEKEEPER'S FRIEND.** By Mrs. CORNELIUS. Revised and enlarged. Boston. TAGGARD & THOMPSON.

This well-known work of Mrs. Cornelius is just republished with some additions. She says, in her preface, that "the receipts except about twenty, are furnished from my own experience or that of my immediate friends." Some of her directions about butter making are rather fanciful. In her directions for making bread she commences at the foundation. She advises *washing* the wheat before sending it to the mill, and speaks of the process of drying as a very light matter. We doubt whether farmers who have had wet wheat would agree with her; but on the whole it seems to be very practical and sensible. We can cordially recommend it to housekeepers, both old and young.

**WET DAYS AT EDGEWOOD WITH OLD FARMERS, OLD GARDENERS, AND OLD PASTORALS.** By the author of "My Farm of Edgewood." New York: CHARLES SCRIBNER.

We welcome with pleasure another book by the most accomplished agricultural writer in America—Donald G. Mitchell. In the nine "wet days," the occupation of which this book is the record, we have talks about agricultural literature from Homer to Loudon—all written in that smooth and elegant style which is Mr. Mitchell's peculiar gift. As a writer upon agriculture, this perfect diction would, in reality, amount to but very little were it not the medium of conveying to American farmers the sound, practical and common sense opinions of an actual cultivator of the soil.

**SILVER'S NEW POULTRY BOOK.** Salem, Ohio: L. B. SILVER.

This is a cleverly-written little book, telling how, with the smallest amount of space, the least amount of food, and the simplest management, fresh eggs may be had constantly; and now while eggs are so high, this is a very important matter. In villages and cities hens enough might be kept by almost any family to

get all the eggs they require, with only care enough of the poultry to make it a pleasant occupation. The great trouble really is that the hens are neglected and then blamed that they give no eggs. Treat your hens well, and you will be well repaid for your kindness. The directions in this little book are plain and practical. Mr. Silver breeds the white-faced black Spanish fowls, one of the best breeds ever introduced into this country. His book and his circulars can be obtained by addressing him at Salem, O.

**NORTH BRITISH REVIEW.** November, 1864. American edition. New York: LEONARD SCOTT & Co.

**BLACKWOOD'S EDINBURGH MAGAZINE.** January, 1865. American edition. New York: LEONARD SCOTT & Co.

These reprints, so long and so favorably known, are still issued at very low rates. The advance in price is by no means equal to the advance in gold. The original editions of the four Reviews would cost, at the present rate of exchange, about \$100. The American publishers give them at \$15. Blackwood alone, or any of the Reviews alone, \$4.00; Blackwood and any one Review, \$7.00; for Blackwood and any two of the Reviews, or three of the Reviews, \$10.00. We wish that all farmers who ever read anything, had these periodicals. They need them more than any other class of people. There is no way in which \$13.00 could be so well spent as in taking Blackwood and three of the Reviews—omitting the Westminster on account of its decided infidel and atheistic tendencies. Its literary merits are equal, if not superior, to the others.

**The Farmer.**

WRITTEN FOR THE GENESEE FARMER BY F. YELLAND, LINCOLN, ME.

Who would not live a farmer's life,  
So free and independent;  
Enjoying health and happiness  
Unto the very end on 't?

Dame Nature his rich banker is,  
On whom he yearly draws;  
Who lines his pocket well with cash,  
While he obeys her laws.

This good old dame of earthly fame,  
Her temper nought can rile;  
For even filth thrown on her face  
Will only make her smile.

And passing strange, yet true, they say  
This is the way he lives;  
The more he scratches her fair face,  
So much the more she gives.

**The People's Farm Mill.**

THIS mill, manufactured by R. L. Howard, of Buffalo, N. Y., will grind corn, peas and other grain as fine as is desired and with great rapidity. We have one of them in use, and should not like to be without it. We can recommend it to our readers as in every way a valuable machine—and this we do unsolicited.

**Ellwanger & Barry's Catalogues.**

THE best illustrated, fullest and most accurate nursery catalogues published in this country are probably those issued from the celebrated establishment of Ellwanger & Barry. Every one interested in any branch of horticulture should keep these catalogues on hand for reference.

We would call the attention of our Western readers to the advertisement of Messrs. Hanford & Bros., the well-known and highly respected nurserymen of Columbus, Ohio.



## ADVERTISEMENT.

## BOYS AND GIRLS

Should all subscribe for the New Illustrated Magazine,

# Our Young Folks

MAYNE REID, MRS. STOWE, TROWBRIDGE, GAIL HAMILTON, LUCY LARCOM, EDMUND KIRK, OLIVER OPTIC, DIO LEWIS, GRACE GREENWOOD, "CARLETON," "AUNT FANNY," and many other popular writers for the young will write for it.

IT IS FULL OF NICE PICTURES.

The price is only \$2.00 a year, and much less in Clubs. Any boy or girl can form a club. The first number sent as a specimen for ten cents. Address

TICKNOR & FIELDS, Boston, Mass.

Send for a circular.

1t

## FARM GATES.

To Farmers and others who are in want of a Cheap, Simple and Durable Gate,

I would state that I have invented three Gates, (all different but not patented,) which cannot but meet with the hearty approval of every farmer either upon the mountain-side or the level prairie. How many thousands of dollars' worth of grain is destroyed every year by stock for want of gates. That miserable make-shift, yclepted bars, is one of the greatest nuisances of the age. Think of the time spent in taking them down and putting them up—the lessons in brachiness given to cattle by putting up two or three only because in haste, and say if true economy does not dictate an utter abandonment of this wretched device for getting into and out of the fields. Why does not the farmer use more gates? Because they are too expensive. These gates of my invention are as cheap and as quickly made as a pair of bars. Below are a few of their merits:

They open from either end; no scantling is used for the frame; there is no sagging of posts, common in gates of the present day; no breaking of latches; no opening it by unruly animals; it is light and strong; besides being a good gate, it can be quickly converted into a portable fence or an excellent sheep-rack. One of these gates used upon the farm in place of bars, will be worth more to any farmer in one year than I now ask for all three.

TERMS.—To any person sending me \$1.00, I will send a drawing, description, and my permission to use gate No. 1; for \$1.50, Nos. 1 and 2; for \$2.00, Nos. 1, 2 and 3; for \$3.00, two complete sets of drawings; for \$5.00, five sets; for \$8.00, ten sets. I will send them to as many persons as there are sets, but to the same office. Address

LORENZO D. SNOOK,

Barrington, Post-office, Yates county, N. Y.

N. B. I have had a preliminary examination made at the Patent Office in Washington, D. C., in regard to these gates. The Patent Attorney who made the examination, says that nothing like them has ever been patented. I would have had them patented, but I can sell them cheaper now than if they were patented, and a patent would not have been issued until late in the spring; and the farmers cannot then build gates as well as at the present time. Hence the course I have taken. mhlt

MY

## "SMALL FRUIT CATALOGUE,"

Containing full instructions for setting STRAWBERRY, RASPBERRY, BLACKBERRY, CRANBERRY, SWEET POTATO PLANTS, &c., also description and prices annexed, will be forwarded to all applicants. Address

A. M. PURDY, South Bend, Indiana. mhlt\*

## PURE CANE SEED

FOR SALE.—Choice lots of the best varieties, (early and late) of SORGO and IMPHEE SEED, of our own selection, and WARRANTED TO BE PURE.

Orders for seed should be sent in early.

SEED CIRCULAR and SORGO HAND BOOK sent free.

mhlt\* BLYMYER, BATES & DAY, Mansfield, Ohio.

16,000 DELAWARE VINES.—The undersigned have for sale 8,000 No. 1 and 8,000 No. 2 DELAWARE GRAPEVINES, propagated the last year from single eyes, and grown under favorable circumstances. They will be sold with all the wood. PRATT & CUSHING.

mhlt\* Fredonia, N. Y.

6 LBS. GOODRICH'S SEEDLING POTATOES FOR ONE DOLLAR—Prepaid by mail. Garnet, Chili, Cuzco, and Pinkeye Rusty Coat, two pounds of each. Per barrel, \$3.50. P. SUTTON.

mhlt\* Ransom, Luz. county, Pa.

## Fruit and Ornamental Trees

FOR SPRING OF 1865.

## ELLWANGER &amp; BARRY

Respectfully announce that their stock of FRUIT AND ORNAMENTAL TREES for spring planting is very large and complete in every department.

Planters, Nurserymen and dealers in Trees are invited to examine the following Catalogues, which give full particulars, and are sent prepaid to applicants upon the receipt of postage stamps, as follows, viz:

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No. 1.—A Descriptive and Illustrated Catalogue of Fruits.

No. 2.—A Descriptive and Illustrated Catalogue of Ornamental Trees, Shrubs, Roses, &c., &c., &c.

No. 3.—A Catalogue of Dahlias, Verbenas, Petunias, and select new Greenhouse and Bedding Plants, published every spring.

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ELLWANGER & BARRY.

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Mount Hope Nurseries, Rochester, N. Y.

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## GENESEE VALLEY NURSERIES,

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Have nearly four hundred acres occupied in the cultivation of

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WE have an immense stock of NORWAY SPRUCE, BAL-SAM FIR, SCOTCH AND AUSTRIAN PINES, AMERICAN ARBOR VITAE (White Cedar), SIBERIAN ARBOR VITAE, &c., &c., from small to large sizes. All have been transplanted once, and the larger sizes two to three times in the nursery, so that success is ensured in planting. They are offered at low rates per dozen, per hundred, and per thousand, and prices will be given. Packed in a superior manner, delivered at Depot in Rochester or otherwise.

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WE have a good stock of this most valuable variety, grown by one of the most successful growers in the Connecticut Valley. Packets containing one ounce, with full directions for culture, will be forwarded to any address for 50 cents. Prices for larger quantities given on application. Address,

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## Silver Medal Wine.

## VINES OF THE OPORTO

OF LARGE SIZE will be ready for planting April 1. Those who failed to get a supply last spring will please apply early. For terms to Agents and Clubs, and Descriptive Circulars address [ft] E. WARE SYLVESTER, Lyons, N. Y.

"RHODES"—THE STANDARD MANURE for Tobacco, Corn, Oats, &c.; also, Top-dressing for the growing Wheat. Our spring supply of this long-established Manure ready for delivery.

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## Delaware and Hartford Prolific

VINES; also, STRAWBERRY PLANTS, by the hundred or thousand of the three choice sorts—RUSSELL'S PROLIFIC, LA CONSTANT, JUCUNDA, or KNOX'S SEVEN HUNDRED. 100 of each for \$4.00; 1000 of each for \$30.

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40,000 STANDARD APPLE TREES, four years old and in good order. Apply to E. AVERY, Hanford Landing, N. Y.

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**J. M. THORBURN & CO.,**

Beg to call the attention of Amateurs and Market Gardeners to their celebrated

NONPAREIL CAULIFLOWER SEED.

25 cents per paper; \$1.50 per oz.; or \$20 per pound.

We can confidently recommend the above as the very best variety in cultivation. ALSO,

EXTRA EARLY PEAS.  
EARLY CABBAGE SEED.  
EARLY AND LATE CELERY.  
ENGLISH FRAME AND OTHER CUCUMBERS.  
EARLY AND LATE LETTUCE.  
WHITE JAPAN AND OTHER MELONS.  
RED, WHITE AND YELLOW ONION.  
FRENCH AND CHINESE RADISH.  
UPRIGHT AND OTHER TOMATOES.  
EARLY FLAT AND OTHER TURNIPS.  
TREE SEEDS IN GREAT VARIETY.

For Varieties, Descriptions and price of all Seeds, SEND FOR THE CATALOGUE OF VEGETABLE AND AGRICULTURAL SEEDS.

**J. M. THORBURN & CO.,**  
15 JOHN STREET, NEW YORK.

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## Collections of Vegetable Seeds by Mail.

20 Choice Varieties for .....\$1.00  
45 Choice Varieties for ..... 2.00

NOTWITHSTANDING the great advance in the prices of most kinds of seeds since last season, we shall continue to furnish the above collections at our former liberal rates. They contain only those varieties that are most valuable, and enough in quantity to seed an ordinary-sized garden. Any person sending for these collections can not but be well pleased, even though they use less than half the varieties. Those who desire larger quantities will find our collections for \$5, \$8, \$15, \$20, and \$25, equally desirable and economical. For list of the contents of these, and a great variety of Vegetable and Flower Seeds, see our

### ILLUSTRATED CATALOGUE,

which will be forwarded to all applicants inclosing 15 cents. To our regular customers it will be sent free. Address,  
mh1t McELWAIN BROS., Springfield, Mass.

### MARBLEHEAD MAMMOTH CABBAGE.

MY CABBAGE IS THE LARGEST IN THE WORLD. In favorable locations it will grow to weigh from thirty to sixty pounds a head! and wherever introduced they leave all other varieties far in the background. They have been raised in every loyal State weighing from 20 to 60 pounds each. They are not only of an enormous size, but when mature are very hard-headed and remarkably sweet and tender. The calls for seed have been so extensive that for the past two years I have been unable to supply it. I can this season supply packages containing seed sufficient for 500 plants, with full directions for cultivation, sent by mail, prepaid, at 25 cents each; five for \$1.00: one hundred for \$15.00. Also, CANNON BALL CABBAGE—an early sort, making the roundest and *hardest* head of any cabbage grown. Per package, 25 cents; five for \$1.00. STONE MASON CABBAGE. This is a very large drumhead, remarkably reliable for heading.  $\frac{1}{2}$  oz., 25 cents; 1 oz., 50 cents; 1 lb., \$4.25; sent by mail post-paid by me.

mh3t JAMES J. H. GREGORY, Marblehead, Mass.

### CHOICE AND RARE SEEDS.

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RESPECTFULLY invite attention to their ILLUSTRATED ANNUAL CATALOGUE AND VEGETABLE AND FLOWER GARDEN MANUAL for 1865, just published. It contains accurate descriptions of the most valuable and popular varieties of Flower and Vegetable Seeds, with explicit directions for their treatment and culture, comprising about 75 pages of closely printed matter, *beautifully illustrated*. It will be forwarded to any address enclosing 15 cents. Address as above. mh1t

### HUBBARD—TURBAN—YOKOHAMA!

I AM receiving letters daily from all parts of the United States, from farmers, gardeners and others, who pronounce my TURBAN to be the sweetest, finest grained, and most delicious fall squash they ever ate. The HUBBARD is *universally* acknowledged to be the best of all winter squashes, while the new Japan squash, the YOKOHAMA, is pronounced the very best of its class. *I was the original introducer of the Hubbard and Turban Squashes.* Packages of seed, (all of my own raising,) sent by mail, with full directions for cultivation, for 25 cents each for Turban and Yokohama, and 15 cents for Hubbard. Five packages of Turban or Yokohama for \$1.00. Hubbard, by mail, postpaid by me, \$2.62 per pound.

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**B A U G H ' S**

**RAW BONE**

## SUPER-PHOSPHATE OF LIME

**BAUGH & SONS,**

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To the farmers of Pennsylvania, New Jersey, Delaware and Maryland, **Baugh's Raw Bone Phosphate** is no new name. Its great efficiency as a Fertilizer, for all crops, has been for years past practically denoted by them in its *continued* use. We want no better assurance of the high appreciation in which it is held by Agriculturists than the fact of so constant an increase in the demand, from year to year, as our article has enjoyed, and it has been our main object to render it, in every respect, worthy of such a favorable estimation.

In order to give greater facility in the application of the **Raw Bone Phosphate**, we have, since the last season, succeeded in making it so fine and uniform as to be capable of drilling. Farmers will find this an important advantage.

The facilities for the manufacture of the **Raw Bone Phosphate** are now very complete, and we can fill large orders with promptness; but it is desirable that all orders should be sent in as early in the season as possible.

It is packed in bags and barrels, and may be had of any regular dealer in Fertilizers, (to whom we advise all farmers to apply,) or of the sole manufacturers,

**BAUGH & SONS,**

No. 20 SOUTH DELAWARE AVENUE,

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The highest market price paid for Bones. mh3t

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**J. M. THORBURN & CO.'S**

## Annual Descriptive Catalogue

OF

## FLOWER SEEDS AND SPRING BULBS,

Containing all the desirable novelties of the season for 1865, has just been published, and will be mailed free on application to

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The *New Zinnia Mexicana*, 25 cents per paper by mail

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MY CATALOGUE OF GARDEN SEEDS, embracing over 200 varieties, (a large portion of them of my own raising,) containing some new and rare vegetables not to be found in other catalogues, is now ready for distribution. Sent free to all applicants. Those who purchased seed of me last season will receive it without writing for it. As the original introducer of the Hubbard Squash, Marblehead Cabbage, and many other new vegetables, I invite the patronage of the public.

mh3t JAMES J. H. GREGORY, Marblehead, Mass.

### WHITEMORE'S CURE FOR FOOT ROT

IN SHEEP is a positive and speedy cure. Has been thoroughly tested, and never known to fail when applied correctly.

Sold by all Druggists.

Persons wishing to test a bottle can have it sent to any part of the country by express by enclosing 75 cents to the sole proprietor, F. W. WHITEMORE, Chatham Four Corners, Columbia county, N. Y., to whom all orders should be addressed. A liberal discount made to wholesale buyers. jan6t

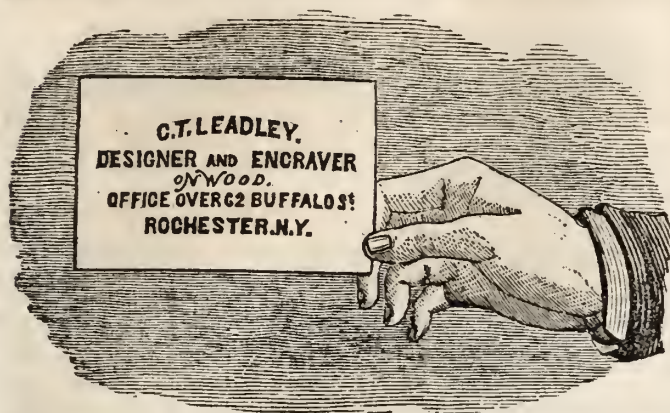
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"DEAR SIR: The potatoes came in good order. Drouth very severe, yet I dug over 4 bushels fine, large tubers from the 4 lbs. seed. Am offered \$5 for the lot, but think it will pay better to plant again. Want the other kinds next spring. Truly yours, G. WILSON, Ottumwa, Ia."

For testimonials, terms, &c., send for circular to

mh1t\* E. WILLIAMS, Mont Clair, N. J.





**H**AVING had considerable experience among some of the first-class Artists and Engravers in New York, I have returned to Rochester and established myself at the GENESEE FARMER OFFICE, No. 62 Buffalo street, third story, where I am prepared to execute all orders for Engraving.

MACHINERY, IMPLEMENTS, CATTLE, HORSES, SHEEP, POULTRY, PIGS, BUILDINGS, PLANTS, FLOWERS, FRUITS, &c., promptly executed in the highest style of the art, and cheaper than any other establishment in Rochester. ORDERS BY MAIL PROMPTLY ATTENDED TO.

STEREOTYPES AND ELECTROTYPES furnished at the lowest rates. Address C. T. LEADLEY, Box 900, Rochester, N. Y.

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**T**HIS SCIENTIFIC and SELF-TEACHING system, which is being ordered by the thousand and sent to every part of the Union, consists of nearly one hundred copies on self-explaining card-board copy slips, and will guide the learner to an elegant command of the pen without schools or teachers. Terms, post-paid to all parts of the Union, \$1.50. Terms to Teachers and Clergymen, \$1.

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The system is unequaled for use of schools as well as private learners, great reduction being made. *Splendid terms offered to Agents.* A fine

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offered to the best Babbittonian Penman, and another for the best improvement from Babbittonian copies.

Send for Circular, or forward money for Penmanship to **BABBITT & WILT**, Principals of *Miami Commercial College*, Dayton, Ohio. dec'64tf

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### TO FARMERS!

**BRADLEY'S TOBACCO FERTILIZER, AND BRADLEY'S X L Superphosphate of Lime**, are for sale at wholesale and retail by the Manufacturer. **WM. L. BRADLEY:**

Sales Office 24 Broad street, Boston.

Pamphlets containing testimonials in favor of his Tobacco Fertilizer. Bradley's X L Manual on the Culture and Curing of Tobacco, with Illustrations, can be had by addressing the undersigned. **WM. L. BRADLEY.**

Highest Cash prices paid for Bones. my

## STAMMERING.

**STAMMERING**—Cured by Bates Appliances. For Descriptive Pamphlet, &c., address

H. C. L. MEARS & CO.,  
277 W. 23d street, New York.

oct'6t

## Sheep Wash Tobacco

I hereby certify, that I have been familiar with all the processes employed by the South Down Company in the manufacture of their "Sheep Wash Tobacco," and that the article prepared under Mr. Jaques' Patent contains all the useful principles of the Tobacco in a concentrated form.

This Paste, employed as a Sheep Wash, according to the directions furnished by the Company, has the effect of curing Scab and other cutaneous diseases, and destroying all parasitic insects which infest the skin and wool of the Sheep, and thereby improves the health of the animal, as well as the quality of its fleece. Employed in the same way, the solution being made stronger, it will destroy those insects which infest the skins of larger animals, and also those that are injurious to vegetation.

CHARLES T. JACKSON, M. D.,

Assayer to the State of Massachusetts, and  
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Wool Growers should beware of any preparation that contains "sulphur," as it is sure to destroy the fibre of the wool. One pound of *Extract Tobacco* will make twelve gallons Wash, and contains the strength of eight pounds of Tobacco, as prepared by farmers.

**Agents wanted in every Wool District.**

JAMES F. LEVIN, *Agent South Down Co.*,  
23 Central Wharf, Boston.

\*\* Farmers, preserve this advertisement, and ask your storekeepers to keep the Wash for sale. A liberal discount to the retailers. feb9t

## BRILL & KUMERLE, SEED MERCHANTS,

Growers, Importers and Dealers in Genuine Garden, Field and Flower Seeds. Also, Trees, Vines, Shrubs, Plants, &c., &c.

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**A** HUNDRED MINUTE DETAILS so important to a beginner, with peculiarities of Onion raising North, South and West of value to old growers. Illustrated with original engravings of "Dave Warren" Onion, "Early Cracker" Onion (new) Large Weathersfield Onion and Potato Onion. Also engravings of Sowing Machines and Weeding Implements. Forwarded prepaid in paper covers at 30 cents.

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feb3t JAMES J. H. GREGORY, Marblehead, Mass.

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STRAWBERRY PLANTS A SPECIALITY.

Fruit Trees, Vines, Shrubs, Garden Seeds, &c. Catalogues on application. septf

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**A**FTER one season's thorough trial of the VENEER FRUIT BASKET, we offer it to the trade with the full assurance that nothing of the basket line now in market can compete with it in its adaptability to the wants of fruit-growers. For durability and style our Basket has no superior, and for strength and cheapness no equal.

For circulars of description, &c., address

feb4t

A. BEECHER & SONS, Westville, Conn.

## North Devon Cattle.

The subscriber offers for sale at a bargain

### FOUR PURE BRED DEVON HEIFERS

of different ages, (two are with calf) and one superior first premium **DEVON BULL CALF.**

Address

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ARTHUR GILMAN,  
Glynlllyn Farm, Lee, Mass.



## GROVER & BAKER'S HIGHEST PREMIUM



ELASTIC STITCH

AND

LOCK STITCH

## SEWING MACHINES,

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## SUPERPHOSPHATE OF LIME, BONE DUST AND MEAT AND BONE COMPOST.

MANUFACTURED BY

**TASKER & CLARK,**

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THE manufacturers offer their Superphosphate to the public confident that it will be found equal to any similar article now in the market. Being made from finely ground bones (not burned), Peruvian guano, and other ingredients having manurial properties, it has been found a superior fertilizer for wheat, grass, &c., &c. Price \$65.00 per tun at the factory.

**MEAT AND BONE COMPOST.**—A valuable manure from refuse meat, bones and other offal from the slaughter-house. Price \$40 per tun.

**BONE DUST.**—Very fine and pure at \$65.00 per tun.

Terms Cash. Address as above.

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TASKER & CLARK, Philadelphia, Pa.

## NEW ILLUSTRATED CATALOGUE. ROCHESTER CENTRAL NURSERIES.

SEND FOR A CATALOGUE

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SPECIAL TERMS OF SALE,

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ORDER YOUR TREES DIRECT.

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### AMMONIATED PACIFIC GUANO.

A REAL GUANO, containing from seventy to eighty per cent. of Phosphate of Lime, to which has been added by a chemical process a large percentage of Ammonia, so fixed that it can not evaporate, making it equal, if not superior, to any other fertilizer.

Price, \$80 per nett tun. A liberal discount to the trade.

Pamphlets, with copies of analysis by Dr. Jackson, Massachusetts State Assayer, and Dr. Liebig, of Baltimore, and testimonials from Scientific Agriculturists, showing its value, can be obtained from J. O. BAKER & CO., Selling Agents, 131 Pearl street, New York.

oct6t

**CRANBERRY PLANTS.**—Of the Bell, Cherry and Bugle varieties. Send for Circular giving mode of culture, price, &c. Also, manufacturer of **Grafting Wax and Tree Varnish** for cuts and bruises on trees. A sure protection from Weather, and will heal sound wood. The Wax is also valuable for sealing Fruit Bottles. For sale by

oct6t

F. TROWBRIDGE, Milford, Conn.

## CHOICE SEED.

WITH the return of another season, I would invite the attention of the public to my ANNUAL CATALOGUE OF GARDEN SEEDS, including over two hundred varieties, many of which are of my own raising. I would call particular attention to the following list of new, rare, or very desirable vegetables:

Cannon Ball Cabbage (new, early, and the hardest of all cabbage; the heads round and about as hard as a cannon ball!) Marblehead Mammoth Drumhead Cabbage (the largest cabbage in the world;) Stone Mason Cabbage (the best of all winter cabbage; the heads hard and very reliable;) Leorwand's Mammoth Cauliflower (the largest of all;) Mammoth French Squash (weighs from 100 to 260 lbs.;) Mammoth Sweet Corn (the largest sort known; selected from ears weighing from two to three pounds; very sweet; excellent for the table;) Yokohama Squash (new, from Japan;) American Turban Squash, (new, the driest, sweetest, and best of all fall squashes—first-rate;) Striped Guadalupe Egg Plant (quite ornamental;) New York extra large purple Egg Plant (the largest of all varieties.)

Ornamental Kale (several varieties in one package, fine for either the flower or kitchen garden;) Pierce's American Cauliflower (the standard late sort in Boston market;) Early Paris Cauliflower (imported seed—the best early sort;) Early White Japan Melon (new, very sweet, fine;) Ward's Star Melon (the sweetest, spiciest, best of all the green-fleshed varieties;) Caterpillar Plant (a curious vegetable; several varieties in one package;) Vegetable Snails (another natural curiosity.) Each of the above at 25 cents a package.

Forty Days Corn (extra early—about ten days earlier than Darling's Early;) Mexican Sweet Corn (the sweetest of all varieties of table corn;) Golden Sweet Corn (an early, prolific, sweet table corn, of a bright golden color, fine;) Hubbard Squash Seed (true; I introduced this;) Cow or Tree Cabbage (for stock;) Yard-Long Beans; Extra Early York Tomato (very early, very prolific, of good size and excellent quality;) Cook's Favorite (very early apple tomato; prolific; of excellent quality;) Yellow Lupins (the plant so highly recommended for subsoiling in a recent Patent Office Report; highly ornamental;) Tom Thumb Pea (very early; grows 10 inches high; very productive;) Drew's New Dwarf Pea (new, early, very dwarf, very prolific, excellent pea, egg-shaped; each plant forms a bush; but one pea being required to about one foot of row;) Brown's New Dwarf Early Marrowfat Pea (a new variety which may be relied on as both the earliest and most dwarf Marrowfat grown; very prolific;) Improved Long Green Cucumber; six finest sorts of Cabbage Lettuce in one package; True Boston Curled Lettuce (the most elegant of all lettuces; quality good;) Ornamental Gourds (many varieties in one package;) Spotted Lima Bean; Concord Bean (a new pole bean, remarkably early; quality first-rate;) Extra Flat Beet, (new, very early, about as flat as a turnip; quality excellent;) Chick Peas (two sorts mixed; extensively used in Europe as a substitute for coffee;) Chinese Sugar Cane (pure; seed imported;) New Jersey Hybrid Cucumber (one of the largest and best varieties cultivated;) Lester's Perfected Tomato (very large and thick-meated;) Sutton's Student's Parsnep (new; recently originated in England; desirable;) Chinese Rose Winter Radish (decidedly the best of all the winter sorts; an acquisition;) Hood's Dwarf Imperial Purple Celery (new; superior;) Indian Chief Bean (a pole bean; can be used as a string bean much later than any other variety; very productive.)

Seed of the above at 15 cents per package.

Catalogues sent gratis to all. Those who purchased seed last season will receive it this without writing for it.

feb8t

JAMES J. H. GREGORY, Marblehead, Mass.

## Columbus Nursery, Columbus, Ohio.

HANFORD & BRO. offer for the Spring of 1865 a large and well-assorted stock of

### FRUIT AND ORNAMENTAL TREES,

EVERGREENS, ROSES, ORNAMENTAL SHRUBS, FINE GRAPES, SMALL FRUITS, &c., &c., to which they invite the attention of Nurserymen, Dealers and Planters who wish Trees, &c., of first-rate quality. Address,

HANFORD & BRO., Columbus, Ohio.

RED CEDARS, 4 to 12 inches, \$6 per 1000.

HONEY LOCUST, fine one year plants, \$10 per 1000.

PRIVET LOCUST, 1½ to 2 feet.

RED DUTCH, RED GRAPE and BLACK NAPLES CUREANTS, strong plants, at low rates.

HALES EARLY PEACH, the best very early Peach.

Also, a full assortment of Leading Market Varieties.

A large stock of NORWAY SPRUCE, 1½ to 3 feet, very fine.

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HANFORD & BRO., Columbus, Ohio.

**TRUE'S POTATO PLANTER.**—A one-horse machine, doing all the work of planting potatoes at one operation. Saves the labor of twelve men. Manufactured by J. L. TRUE, Garland, Maine, Patentee and Proprietor.

Send for a Circular.

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**DOTY'S GR8 CLOTHES & WOOL WASHERS.**

**DOTY'S PATENT  
CLOTHES AND WOOL WASHERS.**

**Economical, Durable, Simple, Efficient, Con-  
venient, and Easily Operated  
WASHING MACHINES!**

The FIRST and ONLY ONES out of more than one thousand patented that have proved

**UNIVERSALLY SUCCESSFUL!**

They save full two-thirds the Labor, Time and fatigue of hand-washing, take less Soap,

**Save \$20 to \$100 a year**

in Wear of Clothing, and will last many years.

THESE WASHERS WERE EXHIBITED AT THE GREAT NEW ENGLAND FAIR OF 1864, WON THE ADMIRATION OF THOUSANDS, AND WERE AWARDED A SPLENDID DIPLOMA; ALSO AT THE WISCONSIN AND PENNSYLVANIA STATE FAIRS OF 1864, THEY WERE AWARDED THE FIRST PREMIUM.

Wool Fleeces may be washed in these machines at the rate of A FLEECE IN TWO MINUTES, without tearing them apart, and the wool brings the price of TUB-WASHED WOOL, which is FIVE TO EIGHT CENTS PER POUND MORE than that washed on the sheep. This is very important to every wool-grower.

They are recommended as the Very Best in SOLON ROB-INSON'S great new work, "Facts for Farmers," by ORANGE JUDD, proprietor of the American Agriculturist, and by JOSEPH HARRIS, proprietor of the Genesee Farmer.

SEND FOR CIRCULAR.

AGENTS WANTED EVERYWHERE.

**DOTY BROTHERS, Janesville, Wis.**

**DOTY BROTHERS, 151 Nassau St., N. Y.**

**BULLARD'S IMPROVED**



**PATENT HAY TEDDER,**

Or Machine for Spreading and Turning Hay.

THE subscriber having purchased the exclusive right for manufacturing and selling (for the State of New York)

**Bullard's Improved Hay Tedder,**

now proposes to furnish the Farmers to the extent of his ability, which must necessarily be limited the coming year, owing to the difficulty of obtaining good and competent mechanics.

Those who desire to avail themselves of one of these great labor-saving machines will please send in their orders early to be recorded in turn. "First come, first served." Address

SILAS C. HERRING, New York.

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JOSEPH HARRIS,

Publisher and Proprietor *Genesee Farmer and Rural Annual*,  
December 1, 1864. ROCHESTER, N. Y.

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## WALKS AND TALKS ON THE FARM.—NO. 16.

I WENT to Geneva yesterday, to see John Johnston. I told you about his sheep that he wanted Mr. Peters and me to look at. He does not like our classifying sheep as "fine wools" and "mutton sheep." He thinks the fine wools will make excellent mutton, and to prove it, asked us to come and see a lot of Merino sheep that he has been fattening the past winter.

The sheep were purchased last fall, and pastured till the 9th of December, when they were put in the yard to fatten, on wheat straw and oil-cake meal. There were 202 sheep. He intended to feed 200 lbs. of oil-cake per day, but for the first week they only got half this quantity. They had nothing but straw and oil-cake till the 6th of February. They were then quite fat—so fat in fact that he was offered more than 10 cents per lb. live weight for them. He declined this offer, however, and commenced feeding them hay, with the same quantity of oil-cake per day (200 lbs.) as before. He then sold them, to be taken away on the 1st of March, for 12 cents per lb. live weight!

I saw them the day before they were taken away. They had just been weighed. They averaged a little over 117 lbs. each, which, at 12 cents per lb., is over \$14 per head. The sheep cost, in September, about \$5.50 each. They have eaten \$400 worth of oil-cake, and 8 tons of hay, worth \$160. They have eaten a good portion of the straw from 18 acres of very heavy wheat—wheat that had straw enough for 30 bushels per acre, but which, on account of the midge, only yielded 18 bushels per acre.

Mr. Johnston says they will eat just as much straw as if they had been fed nothing else. The advantage of feeding oil-cake or grain to sheep, is not that they eat less fodder, but that they lay on fat and shear more wool.

Mr. Johnston thinks the manure is worth five times as much as the straw the sheep have eaten.

Now, how stands the account? Two of the sheep did not thrive well, and Mr. J. sold them for \$15. He has still 20 sheep not sold, worth \$12 per head.

The 180 sold, weighed 21,100 lbs., which, at 12 cents per lb., is \$2,532:

Dr.		Cr.	
To 202 sheep.....	\$1,110.80	Two sheep at \$7.50...	\$15.00
Paid for pasturing....	62.14	20 sheep at \$12.00....	240.00
Oil-Meal.....	400.00	180 sheep at \$14.07...	2,532.00
8 tons of hay.....	160.00		
	\$1,732.94		\$2,787.00

This leaves a profit of \$1,054.06.

Mr. Johnston has been in the habit of feeding Merino sheep in winter for many years, and has always found it a profitable practice, but this year he has made more money than ever before. Last year, he fed 280 sheep, for which he paid \$4.47 each in the fall, and sold them for \$8.50 each, making a clean profit of \$756.

Now what does all this prove? It proves, 1, that Merino sheep can be made very fat, and 2, that when fat, in the spring, they command very high prices; and, 3, that as long as you can buy cheap in the fall and sell dear in the spring, the practice of fattening Merino sheep in winter is highly profitable.

It may prove, too, that Mr. Johnston is a skillful and judicious sheep-feeder—as he certainly is—but it does *not* prove that Merinos are "mutton sheep." Of course their flesh affords excellent mutton, when well fed, and if there were no other kind of sheep in the world, they might appropriately be called "mutton sheep." But as compared with the South-Down, Leicesters, and Cotswolds, I have yet to see the evidence that they are in any sense mutton sheep.

When I was at Rothamsted, Mr. Lawes had 120 Hampshire Down wethers, that, at a year old, dressed 12 stones, or 96 lbs., each. I forget their actual live weight, but at the usual estimate of one stone live weight (14 lbs.) being equal to one stone dead weight (8 lbs.), they must have weighed alive 168 lbs. each. And this, mark you, when they were only a year old, and some of them not quite that.

Mr. Johnston's sheep are four years old, and weigh 117 lbs. each. How much they weighed when put up to fatten I do not know, but if they have increased 2 lbs. each per week, they would have weighed at that time about 90 lbs.



What I want to ascertain is, how much these sheep had eaten before Mr. Johnston bought them, or before they were put up to fatten. I take it for granted that sheep eat about 3 per cent. of their live weight of hay, or its equivalent, per day. Now what would be a fair average weight for these sheep since they commenced to eat grass? If we start with them in June, 1861, when they weighed say 15 lbs., and a year from that time they weighed 50 lbs., the average of that year would be  $32\frac{1}{2}$  lbs. Then, if at the end of the next year they weighed 70 lbs., the average of the year would be 60 lbs.; and if at the end of the third year they weighed 90 lbs., the average of that year would be 80 lbs.

At three lbs. of hay per day, or its equivalent, for each 100 lbs. of live-weight, such sheep would eat:

From June, 1861, to June, 1862, ( $32\frac{1}{2}$ lbs.)	.....	330	lbs. of hay
From June, 1862, to June, 1863, (60 lbs.)	.....	657	" "
From June, 1863, to June, 1864, (80 lbs.)	.....	876	" "
From June to December, 1864, (80 lbs.)	.....	438	" "
		2,301	

You laugh at the idea of a sheep eating over a ton of hay before he is four years old. I admit that such is not the case in practice, simply, however, because the sheep eat other things besides hay. That such a sheep, if it is not starved, eats nearly this amount of food, admits of no doubt. The food that is eaten may be much cheaper than hay, but that is entirely another question. That a sheep weighing 100 lbs. will eat from  $2\frac{1}{2}$  to 3 lbs. of hay per day, is a well ascertained fact, and as a general rule, one weighing 75 lbs. will eat one-fourth less, or in proportion to live-weight. These sheep, before Mr. Johnston got them, had undoubtedly eaten over a ton of hay, or its equivalent, per head. What do we get in return for this?

Suppose they shear 5 lbs. of wool each year for three years, or 15 lbs., worth 70 cents per lb. This would be \$10.50. Then the sheep sold for \$5.50; making \$16 in all.

Now let us make the same calculation on a "mutton sheep," say a South-Down or Leicester. If the lamb in June weighed 15 lbs., as we assumed in the former case, and at a year from that time weighed 100 lbs., his average weight for the year would be  $57\frac{1}{2}$  lbs. If at the end of six months he weighed 140 lbs., his average weight for the six months would be  $127\frac{1}{2}$  lbs. Reckoning that he would eat 3 lbs. of hay per day for 100 lbs. of live-weight, such a sheep would eat:

	Lbs. of hay.
First year, from June, 1863, to June, 1864, ( $57\frac{1}{2}$ lbs.)	..... 629
Next 6 months, from June to December, 1864, ( $127\frac{1}{2}$ lbs.)	... 698
	1,327

In return for this we have one clip of wool, say 5 lbs., worth 70 cents per lb., or \$3.50. This is, so far, a poor show, but what is the sheep worth? We have no means of determining this point, but suppose we put him in with Mr. Johnston's flock of

Merinos. He will be well taken care of, and though he would relish a turnip occasionally, he will take kindly to the oil-cake, and will give a good account of himself. He now weighs 140 lbs. The Merinos weigh 90 lbs. By the 1st of March the Merinos weigh 117 lbs., and our mutton friend would weigh 167 lbs. I think in Mr. Johnston's hands he would weigh more than this, but I have assumed that he gains no more than the Merinos. He would, however, in fact, eat more and gain more than the smaller sheep. But let us make an even thing of it. How then stands the account?

The Merino sheep, up to the time they are put up to fatten, have eaten 2,301 lbs. of hay, or its equivalent, and the "mutton sheep" has eaten 1,327 lbs. The Merino sheep have given us 15 lbs. of wool, worth \$10.50, and the mutton sheep 5 lbs., worth \$3.50. Assuming that while fattening in Mr. Johnston's hands, both eat and increase alike, the Merinos by the 1st of March weigh 117 lbs. and sell for \$14.04, and the mutton sheep weighs 167 lbs. and sells for \$20.04. The mutton sheep eats 1,327 lbs. of hay, and nets (\$3.50 for wool and \$20.04 for sheep) \$23.54. The Merino sheep eats 2,301 lbs. of hay, and nets (wool \$10.50 and sheep \$14.04) \$24.54.

Now a simple rule of three sum will show which sheep affords the best returns for the food consumed: If 1,327 lbs. of hay give \$23.54, how much should 2,301 lbs. give? Ans. \$40.81. The Merino sheep ought to give us a return of \$40.81, while in fact they only give \$24.54.

These figures are of course true only in a comparative sense. Were the Merinos better fed they would fat earlier. Mr. Johnston says he has had Merinos that at 1 year and 9 months old dressed 15 lbs. per quarter and had 12 lbs. of rough tallow, and there can be no doubt that Merinos can be made very fat. But it seems unreasonable to suppose that sheep which have been bred for years principally for their wool can afford as much mutton as those which have been bred with special reference to this object.

It is quite true that English farmers do not make anything like such profits in fattening sheep as Mr. Johnston. The fact, however, simply proves Mr. Johnston's sagacity and enterprise. It does not prove that Merinos are better sheep to fatten than the English sheep. The profit is due to the fact that sheep are higher the latter part of winter or early spring than they are in the fall, and that the majority of farmers have not sufficient confidence to avail themselves of this state of things.

If Mr. Johnston depended on the increase of the sheep while fattening, as the English farmers do, his profits would be on the wrong side of the ledger. He buys a 90 lb. sheep at 6 cents per lb., keeps him



three months on liberal feed and makes him weigh 117 lbs., and then sells him at 12 cents per lb. The increase, 27 lbs., amounts to \$3.24; but this is by no means what Mr. J. depends on for his profits. The original sheep, *aside from the increase*, has doubled in price, and instead of making \$3.24, he makes over \$8.74.

It is true that a part of this increase in price is due to the extra condition of the sheep. If they were not fat, they would not bring and would not be worth such a high price. Still, the great reason of the profits of fattening cattle or sheep in winter, is due to the fact that, ordinarily, meat of all kinds is higher in the spring than in the fall.

It is very pleasant to talk to such a man as John Johnston. He is brim-full of agricultural experience, and communicates it freely. He thinks I plow too much land, and that I cannot seed it down too soon. "Get it into grass and top-dress, and you will make more money." The advice I know is good, but how am I to get manure to top-dress? Before I can make manure I must first grow crops, and I am trying to do this by *thorough tillage*. I believe in good plowing and good cultivation. Make the land clean and mellow and it will grow fair crops—and then you can make manure. "*You must underdrain*," said Mr. Johnston. "But will it pay," I asked, "at the present high price of labor?" "Pay; yes, of course it will pay. I have always said a man could underdrain his farm, however large, for \$400." "How is that?" I asked. "Drain 20 acres, and the profit from that will give you \$400 to drain another 20 acres, and so on till the whole farm is drained." Two crops, he says, have always paid him back the money laid out in draining, and when the land needed it very much, one crop has paid the whole expense. When he first commenced to underdrain, he wanted a Dutch neighbor to let him cut a ditch through a corner of his farm for an outlet. He would not do it himself or let Mr. Johnston do it. He said the land would be "all burnt up the next summer!" Mr. Johnston was compelled to buy this field of ten acres from him before he could get an outlet. He drained it and planted it to corn, and this one crop of corn paid for the underdraining and *the land itself!*

He told me how to kill the Canada thistles on the land I am going to summer fallow. "Plow early in the spring. Harrow as soon as dry. Then let the land lie till the thistles are in blossom, and then mow them down and burn them or put them in the hog pen for manure. After this plow again and turn up the thistle roots—and that will be the end of them."

I was rather surprised to hear him say one thing: "Clover will not pay, except to renovate the land or

to raise seed." As his land gets richer he grows more timothy. He sows the timothy seed in the fall with the wheat, one peck per acre, and 10 lbs. of clover in the spring. But if the timothy is sown early in the fall, there is little use in sowing clover, as the timothy will choke it out.

Last summer he wrote me that he had raised a great crop of timothy, but that the story was too big to tell. I asked him about it yesterday. He top-dressed a piece of timothy grass with a compost of hen-droppings, chip-manure and cow-dung. The timothy was nearly six feet high, and as thick as wheat straw, with heads almost a foot long. He weighed several of the cocks, and estimated the crop at five tons to the acre!

Mr. Johnston piles his manure in the spring, and draws it out in September on to grass land that he intends to plant to corn next spring. He plows up the sod just previous to planting. The corn he *drills* in, and thinks he gets more corn, and certainly much more fodder, than when planted in hills. It is a little more trouble to hoe it, but the extra crop much more than pays for it.

In regard to that crop of "scullions" I raised last year, James J. H. Gregory, of Marblehead, Mass., asks: "Was the soil as *firm* as was needed—as heavily manured? Did the weeds choke the crop? If neither of these, then I doubt not the seed was poor—raised from refuse. Such land as you describe (a light, sandy loam) should do well with the manure *thoroughly* cultivated in in the spring." The land was in good condition, but I am inclined to think it was not *firm* enough. Had I rolled it thoroughly before sowing the seed, I presume it would have produced better onions. "Did the weeds choke the crop?" I am surprised, Mr. G., that you dare ask an agricultural editor such a question! Why, sir, I claim to have originated the phrase "Tillage is Manure," and there is scarcely a number of the *Genesee Farmer* in which I have not written something in favor of thorough culture and the destruction of weeds. Did I not say to my Dutch woman, in the language of the immortal bard:

Go root away the noisome weeds that without profit suck  
The soil's fertility from wholesome onions!

Do you suppose a weed *dare* raise his hated head on *my* farm!

Last fall I had three or four cart-loads of strap-leaved turnips that were pulled up and topped and thrown into small heaps. A severe frost set in, and as they were not covered, I was afraid they were injured. Had they been in the ground with the tops on, I should have had no fears, for turnips will stand considerable frost. I put these frozen turnips in a heap out of doors, and throwed a little straw over them. The others were put in the cellar. I



forgot all about them till a day or two ago, when on examining them I found them sound and sweet, and not in the least shriveled. They kept far better than those in the cellar. The heap was covered with snow, and this had protected them perfectly.

The turnips in the cellar shrivel up and become pithy. Some that had more or less soil attaching to the roots kept much better. I have made up my mind to one thing: To raise more carrots. In the spring of the year there is nothing equal to them for horses. They are also excellent for milch cows, but I question whether, for cows, beets and mangold wurzel are not almost as good, while they can be raised with less labor in weeding, &c.

I have had some correspondence with Mr. J. L. True, of Garland, Me., in regard to his "Potato Planter." I told Mr. True that I did not like to pay out so much money for a machine that I had never seen. He now offers to send me the machine and let me plant the potatoes, and then if I like it I can pay him for it. If not, the machine can be returned. This is certainly fair, and I have accepted the offer. Mr. T. says it will do as much work as twelve men. I intend to plant eight or ten acres of potatoes, and if the machine will work well, it will pay for itself very soon—besides the convenience of getting the potatoes planted at the right time.

A gentleman in Canada wrote me a few days since, wishing to get some seed of the large variety of red clover. Knowing that it was grown to a considerable extent in Wheatland, I wrote to the Hon. John McVean on the subject, and asked him at the same time his opinion of the relative merits of the large and small (or so-called "medium") kinds of clover. In reply, he says:

"The large seed costs about two dollars per bushel more than the small, and as it is a very common practice to plow down the clover every alternate year, or at the most to graze but one year, the small clover is in most general use; as being cheaper, and yielding a more acceptable bulk and quality of hay. And yet, extravagant as it may seem, I am of opinion that if you desire to graze three successive years, you can better afford to pay the market price for the large, than to accept the small seed as a gift. First: The berry of the large seed is perceptibly smaller, and you get at least one-quarter more seed in a bushel, as I have ascertained by actual count on a small scale. Second: If two-thirds of the large seed vegetate and survive, they will do more to cover the land with foliage, and suppress noxious weeds, than three-thirds of the small. Third: Observant neighbors have often expressed the opinion, that the large will carry at least one-quarter more

stock. It continues green after maturity. During the last summer's drouth, the large was green until the fall rains, while the small was early shriveled and brown. Fourth: It penetrates the soil more deeply, has a larger root, and consequently yields more vegetable matter and fertility upon cultivation. Graze close until the 5th of June and take off, and the crop of hay is satisfactory in quantity and quality. It is the only clover to sow with timothy for meadow, as the small is dried up before the timothy is fit to cut."

In regard to sowing clover, and in reply to an inquiry on the subject, Mr. McVean writes:

"It is thought well to sow in frosty mornings, before the ground softens, late in March or early in April, as in this case, the seed slides upon the surface, finding the lowest places, where it is most apt to live during a drouth. I have found it most satisfactory to sow about or after the middle of April, as there is usually a time when the land is minutely cracked or honey-combed. Into these cracks the seed enters, and is covered in by succeeding rains. It is well not to sow it in the mud. An experienced person will sow it very well broad-cast, in calm weather. There is in use a drill carried by a strap, and moved by hand, covering ten feet. Also one like it, that is, a long, light trough, moved by and carried upon a wheel-barrow, covering some eighteen feet, both sowing pretty evenly, and useful in windy weather. The last is manufactured in Caledonia, Liv. Co., N. Y. It is desirable to sow plaster early, for the reason that if sowed late, and not dissolved by copious rains, it fails to protect the seed in a succeeding drouth."

These wheel-barrow clover machines are in universal use in England, but I have never seen one at any of our Fairs, and I did not know that it was manufactured in this country, though I have often wondered that our enterprising manufacturers should neglect so useful a machine.

THE *California Farmer* says that the Humboldt Canal, which takes all the waters of the Humboldt river, not only serves the purpose for which it is designed, but also another, which was not thought of. It has been found that the land through which it runs, that was supposed to be an irreclaimable desert, is capable of golden harvests, through irrigation by its waters.

A CORRESPONDENT of the *Country Gentleman* says: "My horses and cows prefer sorghum to any kind of feed I can give them. I have tried them repeatedly, and they will leave the best timothy for the sorghum and eat it up clean."

DRIVE thy business, or thy business will drive thee.



## SYSTEM OF ROTATION ON GRAIN FARMS.

THIS subject is one of great importance, and it is with no ordinary pleasure that we publish the following article from the Hon. John McVean, of Wheatland, one of the oldest, most experienced and intelligent farmers of Western New York. It will be read with great interest:

EDITORS GENESEE FARMER:—What is the most profitable general system of farming for those who have say from 80 to 200 or more acres of grain land; and who, remote from city markets, are limited to cereals and grazing? Satisfactory results during the last twelve years, or more, have led to the opinion that a six years' rotation, three years in clover grazing and three years in grain, a grain crop each year is the most profitable.

If you have timothy meadow enough for hay, bring more than one-third, if you have not, bring about one-third of your grain land into the condition of having been grazed three years; the residue of your grain land being devoted to clover grazing, or hay, or in process of preparation therefor. The three years grazing will give you a heavy and rich soil. If clayey, plow it at the proper time in the fall; if friable, in the spring. The land is too rich for fallow and winter wheat. Let the first year's crop be corn, beans, potatoes, roots, sorgo, broom or broad-cast corn; according to the labor at command and the probable profit.

The third year's crop should be winter wheat or barley, that the land may be seeded not less than ten pounds of clover seed per acre, applying timothy seed in the fall, and only on the low and wet spots, applying plaster *early* in the spring.

The second year's crop, like the first, is flexible, and may be adapted to profit, or to the convenience or necessities of wintering stock. It may be corn, if preceded by beans, and followed with wheat or winter barley. It may be spring barley, peas or oats, or beans, if preceded by corn. It may be winter barley, followed by wheat, or the reverse. Much as the practice of two successive crops of wheat or barley is deprecated, in one and the only instance of trying it, the second crop was 25 bushels of wheat per acre, while the first was only 17 bushels. I seldom sow winter grain after corn, because of the labor involved, occasionally reserving corn enough for the second year, or substituting peas. A crop of beans or peas is desirable in the rotation, as not materially diminishing the yield of cereals.

## NATURAL LAWS FAVORING THIS SYSTEM.

First: In addition to the fertility induced by grazing, three years will produce a heavy and rich soil, of unappreciated value, which is the cheapest and most essential basis of fertility. This is a very important point.

Second: Three years is assumed as the longest period of rest that economy will warrant for lands adapted to grain. Two years may be equivalent if the land is assisted by surface manures applied in connection with the grass. During these three years it is claimed that the particles of the soil assume new conditions, becoming, upon cultivation, fine, and more friable, and retaining these qualities during the three years of cropping. However well manured, the particles of most garden soils that are constantly hoed, will be found to vary from the size of wheat to acorns. Seed to clover two or three years, and the above results follow. Old pioneers remember that new land was cultivated with little or no grass, and remained mellow from fifteen to twenty-five years, but finally became gritty and heavy. It is claimed that the benefit of giving land rest has not received due attention.

## SOME OF THE ADVANTAGES OF THIS SYSTEM.

You do not commit the sin of stopping grass from growing and trying to get something out of land when there is nothing in it. Impoverished land if well seeded will attain a remunerative fertility, and persistence in the system will improve the land, and enable you, at the smallest cost, to carry all the stock, and raise all the grain, that the land is capable of. Your land, whether open or closed, is doing its utmost in the production of grain or grass, and no time is lost. There is economy of money and labor in seeding but once in six years, and you can afford to do it thoroughly. The third year's crop is not apt to lodge, and the seed takes well,—at least I have not failed in a single instance. *Imperfect seeding and ceaseless tillage are the bane of American agriculture, and are an incalculable loss to the country.* Your manure, coarse or fine, may be applied on the surface at the most proper time, when the grass is short. Your breaking up is done in the fall or spring, when the land is in a proper condition of moisture, and the sod can be well covered in. Subsequent tillage is after harvest, when the land, even if dry, is not hard to plow.

## SOME DISADVANTAGES OF THIS SYSTEM.

It is essential to be efficient in teams and labor from harvest time to the close of seeding, whether this be a disadvantage, judge ye? A fallow may be thought necessary to eradicate noxious weeds. I have found that a crop of winter barley is reaped at a good time to check Canada thistles, and that two deep and close plowings in preparation for the third crop has used them up, except on the back furrows. This is the only instance in which I have plowed stubble twice. I think it will pay. Where quack grass infests land, the second year and after the hoed crop is a good time to give it a very thorough fallowing, to be followed by winter grain for the



third year's crop. It may be deemed a disadvantage to the system that some suspension of raising crops is necessary to get fairly entered upon it.

I might say much from experience of the profitability of this system, of the regularity and uniformity of its processes and proceeds, but desiring brevity, have omitted many details.

Doubtless many persons have pursued a system very like this, yet it may be useful to present it, and should you publish this article, I invite your free criticism for the benefit of your readers. Under the debt entailed upon us by this war, it is of the first importance that American farmers should make the most of their means. To create and economize wealth is patriotism, is merit. JOHN McVEAN.

Wheatland, March 16th, 1865.

### DRILLED CORN FOR FODDER.

EDS. GENESEE FARMER: I have just received the February No., and am glad to see the "Corn Fodder" question so well ventilated by the able writer who takes so many "walks on the farm." He does but justice to Mr. Peters, who must have been calculating with the aid of spectacles of a high magnifying power. Mr. P. seems to believe that two hundred tons of green, or twenty tons of cured fodder, can be produced on one acre. He *may* believe it; I don't. But our simple belief on this point does not *prove* anything, and is worth nothing unless we have had *experience*. He undertakes to prove from experience, but he will find that, although his figures are right, there stands a formidable *if* in the way. *If* one foot *will* produce *nine pounds* of green fodder, undoubtedly an acre will produce two hundred tons, but all figuring of an acre's produce from so small a foundation will be found delusive.

#### EXPERIENCE.

Last spring I planted a small quantity of corn for fodder, especially for summer feed. Some remained uncut, enough to calculate from, perhaps an eighth of an acre. It stood in rows three feet and a half apart, six stalks per foot. My little plot produced at the rate of *one hundred and sixty shocks of fodder and forty double bushels of well-ripened "nubbins" per acre*. Shocks medium size, about like ninety hills of medium corn would make. From experience, I think it would take fifty such shocks, without the corn, to weigh a ton. Forty bushels of corn would weigh twenty-eight hundred pounds, which, added to the fodder, would make about *four tons and a half*. This was on ground which would not have been expected to produce more than twenty bushels of corn, and by the common method of planting, it would not have had more than thirty-five shocks of fodder.

#### COMPARISON OF YIELD OF TWO METHODS OF PLANTING.

Common mode, hills three and a half feet apart, three stalks per hill.	
Twenty-five bushels corn, at \$1 per bushel .....	\$25.00
Thirty-five shocks of corn-fodder, at 12½c. ....	4.38
Amount .....	\$29.38
Thick planting, rows three and a half feet apart, six stalks per foot.	
Forty bushels corn, at 80c. ....	\$32.00
One hundred and sixty shocks of fodder, at 15c. ....	24.00
Amount .....	\$56.00
Common mode .....	29.38
Balance in favor of the drilling .....	\$26.62

I have credited the common mode with five bushels more than I think it would have produced, and also twenty cents per bushel more, so that I believe I am doing more than honestly by. I have credited the drilled acre with 2½c. per shock extra, as no one who would see the two kinds fed together could doubt that it was well worthy that.

There would be just enough fodder to winter two cows, but fodder and corn together would probably winter three milch cows or two horses.

Twenty-five or thirty wethers could be kept in good condition on an acre. But for breeding ewes it would not do—there would be four times as much grain as should be allowed. More than one bushel of corn fed to ewes generally produces bad effects on the lambs.

Farmers often feed fodder and corn together to fattening cattle. For this it would do as well as large ears, cattle to do their own husking.

For feeding to ewes, the amount of grain might be reduced to one fourth by taking off the largest "nubbins" before shocking. These might be fed to fattening cattle with husks on. Better ground would produce more, but I do not think it would in proportion to its capacity for producing saleable corn. Thicker planting might produce too late a growth, not ripening sufficiently to cure well.

J. H. FOSTER, JR.

West Newton, Westmoreland Co., Pa., 1865.

#### SCRATCHING POSTS, LUXURIES FOR CATTLE.—

Sidney Smith used to say: "I am for all cheap luxuries, even for animals; now all animals have a passion for scratching their backbones; they break down gates and palings to effect this. Look! there is my universal scratcher, a sharp-edged pole, resting on a high and low post, adapted to every height, from a horse to a lamb. Even the Edinburgh Reviewer can take his turn; you have no idea how popular it is. I have not had a gate broken since I put it up. I have it in all my fields."

A CHEAP AND INVALUABLE LINIMENT for sprains or bruises where the skin is not broken. 1 pint of soft soap; 1 pint of good vinegar; 2 tablespoonfuls of salt; 1 tablespoonful of saltpetre. First dissolve the salt and saltpetre in the vinegar, then heat the soap hot and add, stir lively, and it is ready for use.

F. W.



## BREAKING COLTS.

IN the spring of the year, while the ground is soft and the temper sobered by low feed and a relaxing atmosphere, is the best time to commence handling colts.

In the first place, the handling of colts should not be entrusted to reckless and foolish boys, who will go about it without sense or reason. The education of a colt is like the education of a child, requiring just as much judgment, and more watchfulness, than when the colt or the child come to a better understanding of themselves and those they have to deal with.

The first operation is what is usually termed halter-breaking; but all colts should be handled with the halter from the time they are able to run with the dam, and should need no "halter-breaking." When this is done, the first operation is to accustom the colt to the bridle bit. This should be done with perfect gentleness and progressive application of the rein, so that the colt will understand what is wanted, instead of being astonished by applications which he cannot comprehend. To put a green colt into a biting tackle, truss up his neck until his chin nearly touches his breast, and thus leave him for half a day to sulk in the barn-yard, is an infernal outrage that ought to be a penitentiary offence. The pain thus thoughtlessly or purposely inflicted is excruciating and inexcusable.

Along with the lessons of bridle wisdom, should come the first lessons in bare-back riding, or riding upon a blanket and surcingle; from which proceed to gentle exercises under the saddle.

The next step is to put the colt in harness, by the side of a steady and reliable horse. The harness should be put on for a while, several times, so he will become accustomed to it, before being called upon to draw in it.

Breaking a colt, is a misnomer; a colt should never be broken, but tamed and educated. A colt that is broken has lost the best qualities of horsemanship. A colt that is thoroughly educated has arrived at the perfection of his race.—*Ohio Farmer.*

## A NEW FORAGE PLANT.

A COARSE grass, a native, we believe, of Georgia or South Carolina, has been introduced into France, and is attracting much attention. It is called "*Brome de Schrader.*" M. Barral, editor of the *Journal d'Agriculture Pratique*, has distributed 3,000 packages of the seed to cultivators in different parts of France, Germany, Italy and England. It is stated to be a plant that will grow very early in the spring and late in the autumn, and though affording a coarse forage, it is eaten with avidity in the green state by cattle and sheep. We do not know whether the seed is for sale in this country.

## RAISING OAKS.

LAST fall you mentioned, in the *Genesee Farmer*, the subject of raising oaks, which I did many years since; indeed, I know two plans, but one may be cheaper than the other. Yourself and friends can try which is thought best. I took half an acre of land and had it trenched two spades deep, at 1s. 6d. per rod. I drew drills 4 feet apart and scattered a good parcel of white oak acorns (1st of March) on them, and covered them over. They came up very well, and grew from two to five feet high, but as I did not side them in with the spade, that is, cut the tap root off, which I should have done, upon transplanting such as I wished to remove, leaving the remainder to grow up for timber, I found that those that had made a tap root had only grown two feet high, while those that had made only horizontal roots had grown five feet high in the *same time*. It was found afterwards, by Commissioners of Woods, that where oak trees were transplanted after having their tap roots cut off, they were as large in 18 years' growth as those planted with their tap root left on were in 45 years' growth. I have not planted either fruit or forest trees with tap root since.

I shall now tell you of another plan: An Englishman wished to raise a wood of timber with brushwood. He took a field of eleven acres and made it fallow with divers plowings, harrowings, &c.; as usual; sowed it with wheat, and then sowed it with 2½ bushels per acre of white oak acorns, harrowed them in with the wheat, got a fine plant of both, and at harvest time reaped the wheat without cutting the tops of the oak plants. He then shut the field up for 18 years. He then cut the underbrush out for faggot wood, kindling fires, &c., which he sold, I think, for £7 or £8 per acre, or sufficient to cover all expenses. He selected, I think, eight, ten, or twelve hundred of the handsomest plants, to produce finest timber, leaving the stumps of those cut down to produce future crops of brushwood, to be cut down every sixteen years, for various purposes, as directed by the owner or a wood ranger.

Here we have a different climate. But as all houses, gardens, orchards and buildings ought to be sheltered from east, north and west, by plantations, as done in England, I think if it is to be done with oak plants, an acre, or any quantity of land near a premises should be summer fallowed and stetched up, and ten feet wide at best, then as soon as the acorns can be procured, draw two furrows on each stretch, five feet apart and three or four inches deep, to prevent the young plants being frozen out the first winter, which I have seen done; then, when the plants are four or five feet high, some may be transplanted, leaving them some five feet apart each way all over the ground, and in eighteen years took



each one out good for some purpose, such as sheep hurdles, ledge hurdles, split ledge gates, &c.

Cedars are a good shelter, and very useful as well as ornamental, but good oaks pay much better, and will always be wanted and command a high price.

South Cayuga, C. W., 1865.

R. F. C.

### THE FACTORY SYSTEM OF CHEESE MAKING.

OUR friend Mr. Harris, of the *Genesee Farmer*, thinks that the Factory System of Cheese Making can only continue profitable while the premium on gold sustains the present price of the article. He says:

"The average price of cheese sold by the different factories the past season, must be taken at 20 cents per pound. With gold at \$2.25, which may be taken as the average of the past year, this would give us not quite 9 cents per pound for cheese in specie. The extra 11 cents per pound now obtained is purely fictitious. Take this away and where would be our 'cheese factories?'"

In our last "Foreign Notices" we quoted a statement from the London *Mark Lane Express*, to the effect that the actual cost of production for cheese in England, is rather above than below 5d. or 6d. a pound. Taking this as 10 or 12 cents of our money, we think we might fairly assume that our cheese, if of a quality such as to command the full price of good English cheese, would be sure to sell in that market at least for the price above named. But allowing for freights and profits of dealers, and taking 9 cents as its probable home value,—if the cheese made in factories is sure to obtain this price, while that made in the ordinary way will not average perhaps more than 6 to 8 cents, we confess we can see no reason why the one cent per pound paid the factory for making, will not then be as good an investment as it is now. The average price of cheese in New York for twelve years past, according to the table appended to the last report of the Secretary of the Treasury, have been—taking the two months of February and August:

	Feb.	Aug.		Feb.	Aug.
1851.....	6@ 7	4@ 6	1857.....	11@—	5@ 9
1852.....	6 7	6 —	1858.....	6 7	4 8
1853.....	8 9	8 —	1859.....	8 10	6 8
1854.....	10 12	7 9	1860.....	9 11	7 10
1855.....	9 10	6 9	1861.....	9 10	5 7
1856.....	9 10	6 9	1862.....	5 7	4 8

During these years the price has been more frequently below than above 9 cts.; and it has been a price, we think it fair to assume, as a general rule, created by the home market—not by the demand for export. Thus, in 1859, and again in 1861, it touched 2 cts. a pound in the month of July; in 1858, 3 cts. in August; in 1862, 4 cts. in the same month; and at some time during the summers of the other 12 years, it went down as low as 6 cts., except in 1853, when the lowest price was 8 cents, and in 1860, when the lowest price was 9 cents. Such are the

fluctuations to which the home market is subject; and if, as we do not think it too much to hope, the factory made cheese will command a uniform price, based upon the actual cost of production abroad, of at least 9 cts. per lb.—or even of 8 cts.—the difference in its favor over that sold in the home market, when unsustained by a foreign demand, would vary all the way from one to six cents per lb. during the season of production.

The question, as we have before said, appears to us to hinge mainly upon the point of *quality*; and the great danger to the factory system arises from the chance that in the demand for managers, inexperienced and unqualified persons will assume that post, under whose control the product, instead of being constantly brought more nearly to the foreign standard, may be allowed to run back to something like the old average of home-made cheese. As to the cost of carrying the milk to the factory, our cotemporary overlooks the almost universal arrangement now adopted, by which the same team carries the milk of all the farmers in a certain beat; but admitting his figures to be correct, we believe the labor and cost of carrying the milk to be less than that of making the cheese in the house, and as above stated, that with the exception of a few of the most careful and skillful dairymen—taking the average of the dairy farmers—the larger price received for the cheese made at the factory will more than make up for the charge involved. One cent a pound covers this charge, in ordinary times—the proposition to increase it arises merely from the temporary increase in the actual expenditure for labor, &c.—*Country Gentleman*.

We give the remarks of our esteemed cotemporary entire. The subject is an important one, and we should be glad to have it thoroughly discussed.

HOW TO MOVE A SULLEN OX.—"Did you never observe," said a plain man, a friend of ours, a few days since, as we were driving a dog out of the cow pen, to prevent his taking refuge behind us—as the cows took him by turns to chase him over the lot—"did you never observe that a cow never will make friends with a dog?" "Often." "Well, the best way you ever tried to make steers rise when they get sullen, and lie down, is just to bring a dog and drop him down on them. It will make them jump up when nothing else in the world will."

SHRINKAGE OF HAY.—The loss upon hay weighed July 20th, when cured enough to be put in the barn; and again February 20th, has been ascertained to be 27½ per cent. So that hay at \$15.00 a tun in the field is equal to \$20.00 and upward when weighed from the mow in winter.





### COTSWOLD SHEEP.

WE have the pleasure of presenting the readers of the *Genesee Farmer* a cut of a Cotswold Ram belonging to William Lane, of Broadfield Farm, Northleach, England. "At the great Battersea Fair, the Cotswold hillmen furnished," says the *Mark Lane Express*, "the feature of the sheep show with an entry of ninety strong. The old rams were an admirable lot, and Mr. Lane's first ram perhaps at all points the best sheep of the show. He was certainly considered by many breeders the finest Cotswold ever exhibited, and, with such a character, was well worthy of being portrayed as a sample of his sort. Standing famously on his forelegs, and with a wonderfully straight and wide back, a good head, and of a very superior quality, he easily separated himself from all the Garnes, Mr. Handy, and others could achieve in a very good class of old rams. It may be a point of some interest to add that the best Battersea ram was a twin sheep."

**A CHEAP FENCE.**—One way to "save the fragments" of a nearly used-up rail-fence, is to take the crooked, broken, and partially rotten rails and cut them into half-lengths, and then make every other length of the short rails. A rider, with stakes cross-



ing the center of every long length, would add materially to its strength and permanence. Such a fence will last several years, and answer in the room of a better one—a consideration worth while in these days of scarcity in fencing materials.

### ONIONS, AND HOW TO RAISE THEM.

JAMES J. H. GREGORY, of Marblehead, Mass., the well-known gardener and seed-grower, has published a treatise on the cultivation, gathering, storing and marketing of onions, which, from its plain, practical directions, must prove useful to those about to engage in this profitable branch of farming. The subject is treated on under the following heads:

#### SELECTING THE SOIL.

Onions thrive best when sown year after year on the same land, except that they are more liable to injury from rust. Mr. G. says he recently examined an acre of ground where onions have been planted continuously for three generations, without perceptible decrease in the quantity or quality of the crop. "Onions can be raised on a variety of soils, but yield the most satisfactory returns on a sandy loam, a gravelly soil, or, to state a general rule, on those soils which are light in structure. As onions are brought on the heavier soils, the first effect will be a deterioration in their appearance, the outer skin of the yellow varieties losing its fine, clear, translucent yellow, and becoming thicker, duller, and less attractive in appearance. If planted on a wet, or very heavy soil, the crop will mature late, if it matures at all, giving a large proportion, of that dread of the onion farmer, scallions, or 'scullions,' as they term them, meaning those whose growth runs mostly to neck, forming little or no bulb or bottom. The area of land selected should be free of all large stones, as such interfere seriously with the straightness of the rows, the planting, hoeing, and general cultivation of so small sized a product. The land



should be laid out in as nearly a square as practicable, as this facilitates estimates of manure, seed, and crops, gives greater regularity to the work, and economizes in the cultivation of a crop which requires a great deal of passing over. To protect the crop from the washing of heavy showers, the land should be level or very nearly so, otherwise a rush of water will bare the roots of some, and heap the earth around the necks of others, to the injury of each."

#### PREPARING THE SOIL.

The great point is to get clean land. Better give up planting for a year, and thoroughly summer fallow, rather than sow on weedy ground. "In the Eastern States it is found, as a general rule, that success with the first crop of onions is affected by the crop which grew in the land the previous year, and that onions will follow carrots better than any other crop; next to carrots, corn and potatoes are ranked as good preparers of the ground, while to succeed well with onions where cabbage has been raised the previous year, is comparatively rare. Were there no other reason, the clean tilth which carrots insure, makes it an excellent crop to precede onions."

#### THE MANURE.

"Onions require the very best of manure, in the most tempting condition, and plenty of it. Guano, pig manure, barn manure, night soil, kelp, muscle mud, superphosphate of lime, wood ashes and muck are, either alone or in compost, all excellent food for the onion. Old onion ground, to maintain it in first rate condition, should receive from six to eight cords of manure to the acre, while new onion ground, to get it in first rate condition, should receive from eight to ten cords of manure."

Night soil composted with three parts muck or loam is excellent for onions. The heap should be turned and worked over till it is light and fine. But barn-yard manure should be thoroughly decomposed and worked over till it is very fine. This latter point is of great importance.

Mr. G. says that when Peruvian guano was sold at \$60 per ton, no artificial manure was found so profitable as this for onions. It was better to apply twice, once at the time of planting, and again sown broadcast when the onions were about half grown. Superphosphate, he thinks, should also be applied twice. The results, he says, are not always satisfactory, but he has seen 800 lbs. applied to the acre produce as good results as seven cords of rich compost, applied side by side. We think 800 lbs. of superphosphate, if it is a good article, is about twice as much as is necessary.

#### PLOWING.

"The farmer who brings up the sub-soil on his onion bed, will find he has made a mistake. Onions

do not require deep plowing; four or five inches is sufficient depth to insure a good crop. One of the finest pieces Mr. G. saw last season was managed by carting on the manure in the fall, and simply giving it a thorough working into the soil with an ordinary one horse cultivator, in the spring, after which the land was raked and planted, no plow, or any implement other than the cultivator having been used. In this instance the soil was naturally quite light."

#### THE SEED.

"In some localities, three pounds and a half of seed was thought sufficient to an acre; afterward this was increased to four, then to four and a half, and now five and six pounds are sometimes planted. Land that is planted to onions the first time requires more seed than old land. If it is designed to pull the onions when small for bunching for the early market, then seven or eight lbs. of seed will be required for an acre. If the intent is to raise the very small onions known as 'setts,' which are stored over winter to be planted in the spring to produce early onions, then a much larger quantity will be required. Of course it is of the first importance that the seed should be reliable." The usual test is to place it in water, the good seed sinking. Mr. G. says this is not always reliable. It is better to test it by putting a hundred seeds or so in a moist woolen cloth, fold the cloth together and put it in a moderately warm place. The good seed will sprout, and you can thus ascertain what proportion will fail to vegetate.

#### WHAT KIND OF ONIONS TO PLANT.

The three standard varieties in the United States are, the large Red, Yellow and White.

The Large Red is commonly known as the Wethersfield Onion. It is divided into four varieties, viz: 1. *Late Large Red*, a very large, thick, late onion, attaining a diameter of from three to six inches, and on the fertile prairies of the West, not unfrequently eight inches. 2. *Early*—Somewhat flatter than the former, smaller, and matures earlier. 3. *The First Early*—Still flatter, smaller and earlier. Matures the last of July. 4. A globe variety of Early Red Onion, of good size and flavor, and of a light, handsome red color. It is difficult to get the seed pure.

There are also four varieties of Yellow Onion, of which the Yellow Flat, called also Yellow Dutch and Strasburgh, and in the Eastern States the "Silver Skin," is the parent. These varieties are, 1. *The Common Flat*, (incorrectly called Silver Skin, which properly belongs to the White Portugal.) 2. *The Early Cracker Onion*—the great objection to which is that it bruises as easily as an apple. 3. *The Early Round Danvers Yellow Onion*.—The Danvers is an early onion, maturing within a week or ten days of the Early Red or Cracker Onions. It is very prolific, and, like the Red Globe Onion, gives



larger crops by about one-third than the flat varieties. It also commands a somewhat higher price than the red varieties.. 4. *The "Dave Warren,"* a variety of the Early Round Danvers, a very desirable sort.

#### INTERMEDIATE ONION.

A variety half way between the Common Flat and Danvers Onions—flatter than the latter and thicker than the former. "It probably originated from the efforts of growers, some years since, to produce an onion that should be more oblong, more egg-shaped than the Danvers, that they might add still more bulk to their crops. The result of such a wide departure from the normal form, during a very wet season, was to make quite a proportion of the crop scallions; upon this they went somewhat to the other extreme and produced the Intermediate Onion, though no variety is more free from scallions than the true Danvers. Mr. G. says he has seen acres of them, on which not a peck of scallions could be found, the entire yield being well matured, of fine size and finely shaped. The Intermediate Onion is about as early as the Danvers, grows very symmetrical, is very compact and handsome, crops well and keeps well. A casual observer would notice but very little difference between this and the true Danvers."

#### WHITE PORTUGAL.

"The cultivation of this early onion is mostly confined to the raising and planting of what are known as 'setts' or button onions, or onions for early family use, as it is a very poor keeper. It is a sweet, mild onion, of a good size for family use, though averaging considerably smaller than the varieties that have been described. Mr. G. says that for family use, except for frying, the common onions of the market are much too large to be economical—the two outer layers of an onion three inches in diameter and upwards, though making up about half the bulk of the onion, are usually coarse and tough, and slough off when boiled. The sweetest, tenderest, and most economical onion for this purpose of the yellow sort, are those that are from one to two inches in diameter."

On the whole, Mr. Gregory thinks the Danvers Onion the most profitable variety to grow. He has known 900 bushels raised on an acre.

**SUMMER-FALLOWS FOR WHEAT.**—Geo. S. Rogers, of Delaware, C. W., in a letter to the *Country Gentleman*, says: "I may say, from my experience, that the best crops of fall wheat I can raise, are from ground only once and deeply plowed, and afterwards cultivated twice or three times." This is the opinion of many good wheat-growers in Western New York. We have still a liking for the old-fashioned summer-fallows. What say our readers?

#### AGRICULTURAL IMPROVEMENTS—NO. 2.

THIS seems to be the disposition of the great mass of the farming community throughout these New England States. They seem to be dormant on the subject of self-improvement. And why is this? Simply because that farmers must go on the principle of "every man for himself;" and the whole aim of the farmer's life, while in this world, is *struggling for the "almighty dollar."* You talk with many farmers on the subject of education and improvement, and what will they tell you? They have no time for reading, or study—which is a fallacy as transparent as a *down-east foggy*. If they would be candid, they would say it was for a want and disposition and mind to do so. They would hit the nail plump on the head.

Now this want of time is all *gammon*. You farmers have the most time for self-improvement, and should be the best educated of any class of men under heaven. If perchance there should be a political "caucus" called, to be held at the tavern, how eagerly do they rush in to talk of Congress, Legislature, &c. Then before adjournment take a drink of the animator, light pipes, and then count *noses*, to see how the vote will go at Town Meeting. Then just post up a call to organize a Farmers' Club in the district school house, and then adjust your glasses and be ready to count the number of these patriotic farmers who are in attendance. Now all must admit this is no fancy sketch, but a stubborn fact. We do not make any pretensions as to being endowed with the spirit of prophecy, and we are well satisfied, from personal observation, that there is a great neglect and want of stimulus in the mind of the farmer, for his improvement in agricultural science.

In fact, we believe that the time has come when more must be said and written, on the *improvement of the mind as well as the soil*. Practical agriculture, the farmer has always had, and shall always have, as long as the soil is cultivated, although the kind and quality will depend on the character of the farmer. But practical farming does not of course bring with it a corresponding improvement of the mind. But, alas, "tell it not in Gath," &c., that the improvement of the mind consumes too much time, and does not bring along quite *so big a pile of greenbacks* as the other system, and of course it must be dispensed with.

We have been brought up to labor on the farm, hence we feel a lively interest in every movement made to elevate the farmer. The farmer in this day in which we live need not be ignorant. There are works issued from the press that just meet the wants of our farming community, (we allude to that old pioneer, the *Genesee Farmer*,) freighted each



month with articles tending to the improvement of the mind; and yet how many families are destitute of its monthly visits. And why? Oh! they can't afford it; and yet, will you believe it, they spend five dollars a year for that poisonous article, *tobacco*, which undermines the constitution, and spend their long winter evenings dozing in the chimney corner. If they show any vitality, it is in rousing to take a smoke. Why, farmers, will you let these golden opportunities flit away, and that mind become a wilderness, when, by self-improvement, you might have been a *Clay* or *Webster*, and the nation been swayed by your eloquence. This theme of self-culture is too much neglected among the farming community. Young man, do not think because you have left the old school house, there is no chance for improvement. It is an error. You have gone forth into the great school-room of Nature, and if you have a mind of any capacity, you can *learn*. *Learn*, improve every leisure moment in study, and you will never regret it.

J. L. HERSEY.

Tuftonborough, N., H., 1865.

#### TO PREVENT ABORTION IN COWS.

MAKE use of none but strong, healthy bulls, of not less than two years old. Keep the cows confined as little as possible; that is, a certain amount of exercise is essential to perfect health, even in this direction. When such an accident takes place, remove the cow *instantly* from the rest of the herd, even out of hearing, of the remainder of the cows. If such accidents were common among my cows, I would quit stabling them in close confinement, or not allow them to stand in the stalls except in the night, and make the nights pretty short at that.

I would also remove cows farther from each other in the stalls, and saw the tips of the horns from all the cows, or put on buttons, or both, so that they would not suffer from fear. This should be done whether we stable cows or not.

Salt increases the quantity and perhaps the quality of milk, and some dairymen are sharp enough to increase the salt more than the feed, which must weaken the whole system.

P. F.

Wellsburg, Chemung Co., N. Y., 1865.

QUALITY OF DIFFERENT KINDS OF WOOD.—The celebrated experiments of Marcus Bull, of Philadelphia, many years ago, gave the following results, showing the amount required to throw out a given quantity of heat:

Hickory.....4 cords.	Pitch pine.....9 1-7 cords.
White oak.....4 3/4 "	White pine.....9 1-5 "
Hard maple.....6 3/4 "	Anthracite coal....4 tons.
Soft maple.....7 1-5 "	

From this it would appear that there is less difference between hard and soft maple than is generally supposed.

#### NOTES BY S. W.

I WISH you would tell us in the April No. of the *Farmer*, how to make ground bones into soluble superphosphate with sulphuric acid—what proportion of acid and water, and how much water to the acid. My son Horace, near Buffalo, grows seven acres of cabbages, and as animal manures are scarce and dear, he wants to try the effect of the phosphate of lime. They have a bone mill there which grinds the bones tolerably fine; but as he wants the immediate effect of the manure, it is important to know how to make it soluble.

Joseph Wright has reduced his horses to about 50, including colts, but he increases his stock of bovines, feeds all his corn, 1,800 bushels, and cuts fine all his corn stalks. His Dent corn ripened quite as early as his Dutton, yielding one-third more, and henceforth he will plant the Ohio Dent only. He grows corn in drills, sowing it early, so as to have it fit to cut up in early August, to soil his milch cows as his pasture fails. He says it must form ears nearly ready to glare before the stalk has its maximum sweetness. If cut earlier, it is either insipid or bitter. Although this was a backward corn season, Wright never had a better crop. On eighteen acres, he had not more than three bushels of soft corn. He cut it up and stacked it as soon as the ears had glared, to save the stalks with their leaves and juices intact. If pains taking and manuring will not pay in the corn crop, light manuring and poor tillage is ruinous. A farmer confessed to me that if he had planted one-half less land, and put on the same labor and manure, he should have got double the crop he did this year; the result was, he had not corn enough to fat his hogs, and had to kill them on the 1st December, when they sold at 14 cts. per lb. only. Had he kept them until New Year's day, they would have sold at 17 cents per lb., and the increased weight added would have nearly doubled his profits in pork making, to say nothing of the loss in the use of his badly used corn field.

Why don't our farmers go into the Chinese Sugar Cane growing? It does first-rate in our climate, and it will be long before we will get sweetening within 50 per cent. of former prices. Sorghum now sweetens the whole country west of our old foggy State.

The March No. of the *Farmer* is very interesting in practical matter. I learn by that letter from St. Peters, Minnesota, that they grow the Dent corn successfully, although the growing season is shorter there than it is here. I am told that they have none of our cold, wet spells in late May and during the month of June, but more uniform heat and moisture during the growing season. Hence, no wonder that your correspondent can beat Cortland Co. in this State, "*all to pieces*," in corn growing, at



St. Peters. Thus it would seem that a kind Providence has compensated Minnesota for her Siberian winters, by a uniformly warm, kindly, and growing summer. Per contra, California has a mild winter, a volcanic soil, rich in all the mineral elements of plant food in soluble form. Yet with her monster sylvia and her spontaneous cereal crops, all her farmers who cannot irrigate from the mountain streams, are often reduced to short rations by long protracted droughts; and in her best seasons, the king of American cereals, Indian corn, is a very short, inferior crop.

S. W.

Waterloo, March 13, 1865.

To make superphosphate from bones, you require to each 100 lbs. of bone-dust, about 50 lbs. of common oil of vitriol, and from 50 to 75 lbs. of water. It is generally recommended to mix the water with the acid before applying it to the bones, but it is better, ordinarily, to pour the water on to the bone-dust, and mix it thoroughly, till the whole heap is evenly saturated, before applying the acid. The heap must be repeatedly stirred. The principal point is to get the proper quantity of acid and water in *direct chemical contact* with the proper proportion of bone-dust. Any means which will do this will make good superphosphate. We should prefer, especially if the superphosphate is needed immediately, to "boil"—as we have heard it designated—about 50 lbs. of bone-dust at a time, in a half-barrel or other vessel. Put in the 50 lbs. of bone-dust and 25 to 30 lbs. of water, mix thoroughly, and then pour in 25 lbs. of acid and stir briskly for a few minutes, till it is evenly mixed. Then throw it into a heap and repeat the process. This is more trouble than to mix a large heap at once, but it will make a better article and it will be ready for use much sooner. We think there is a better prospect of our getting sugar from beets than from sorghum.

**SUMMER FALLOW TO DESTROY WIRE WORMS.**—In the February number of the *Genesee Farmer*, you give Mr. Adams' plan for exterminating the wire worm. He is quite right. I and others here have done the same thing. I was also recommended to turn under a crop of buckwheat. I confess I laughed at it, but I did so, nevertheless, and though I did it seven years ago, I have never seen a wire worm since where the buckwheat was turned under, and it is still the richest part of the field.—WILLIAM COOK, *South Cayuga, C. W.*

A WRITER in the *N. Y. Evangelist* contends that there is nothing gained, except extra labor, by planting potatoes in drills. He prefers to plant in hills. The object should be, he says, to get few and large plants in a hill. On the other hand, some of our most experienced potato growers think they get much larger crops by planting in drills.

## CULTURE OF CARROTS.

I HAVE a small farm, of 24 acres, divided into four fields. Two fields are in peach trees, with 1,400 trees, five and six years old, which produced 3,300 5½ peck baskets of peaches last season. The other lots are in grass, one for mowing, the other for pasture. The pasture lot is quite out of grass, which will have to go in corn this spring, and then in wheat and grass next fall. I have a mind to plant one or two acres in yellow carrots, believing they will pay better than corn. Will you please inform me on the subject, through the *Genesee Farmer* how many pounds of seed are required per acre; when and how the seed should be planted, kind of manure, &c. The land is clay, with a deep soil, matted with short blue grass, (the clover and timothy worn out.)—JAMES PRICE, *Cecil County, Maryland.*

Three lbs. of seed, if evenly sown, is sufficient, though when sown by hand, 4 lbs. is generally required. Sow as soon as the soil is dry and warm, and can be got into good order. As weeding is the principal expense, great care should be used to get the land smooth and level. This will save much time in hoeing. As the land is plowed, go along each furrow with a rake, and see that the manure and sods are all covered, and make all smooth and nice. A marker, with teeth 14 inches apart, can be used to make the rows. They should be half an inch deep. Into these the seeds are sown by hand. If a drill is used, the marker will not be necessary, but care should be used to make the rows straight. Soak the seed for two days before sowing, in warm water, and dry it with plaster till it will separate. Cover the seed with a roller or with a rake. If the weather is favorable, the plants will be ready for hoeing in three weeks. Pass a hoe lightly through the rows, to loosen the soil and kill the weeds. In a week or ten days hoe and weed again, and thin the plants where too thick. In two weeks more hoe again, as deep as you can without hurting the plants, weed and thin out, leaving but one plant in a place, six inches apart. This will be all the work that is needed, unless weeds should grow. These *must* be destroyed, or you will not have a full crop. Five hundred bushels per acre is a good yield, but from 800 to 900 bushels are sometimes raised. If you could put on a barrel of Baugh's raw-boned superphosphate per acre, it would be a great help. Sow it broadcast after the seed is drilled in, and cover it with a rake.

A CORRESPONDENT of the *Country Gentleman* says: "Those farmers who know the ill effects of working land wet, avoid it as they would a pestilence."





### CULTURE OF HOPS.

WE make the following extracts from a valuable Essay on the Culture, Drying and Baling of Hops, in the last number of the *American Agriculturist*. It is from the pen of Herman C. Collins, of Morris, Otsego Co., N. Y.:

**"VARIETIES.**—There are many varieties of hops cultivated in this country, but English Cluster and Grape Hops succeed best. The Pompey Hop is very large, with long arms, but it is more injured by rust and insects than the first mentioned, on which the hops hang in large clusters; both are early varieties.

**"SOIL AND SITUATION.**—The situation for a hop yard should be such that there is a free circulation of air—never by thick woods in a valley, for there rust, blight, mould, and lice most abound. They should have plenty of sunshine, which is the surest preventive for all these. The soil should be dry in winter, and have no water on the surface at any time. If not naturally rich enough, it can be made so by manuring. Any soil where good crops of corn or potatoes can be grown is suitable, but it should be easily worked and kept mellow, as there is much cultivation to be done. Where wheat will not grow, the soil must have lime, if hops are planted. In central New York, they are raised on very high land, where none but the smaller varieties of corn will grow.

**"PLANTING.**—The best time to plant a hop yard is in the spring, as early as the ground can be worked. The ground should be plowed, and made as fine and mellow as possible; then stake it off, and either mark it out with a plow or line it, and plant with a 'dibble,' which is the surest way to have the plants all live. Corn, potatoes, or any other hoed crop, can be raised the first year with the hops. The rows should never be less than eight feet apart, and on the rich bottom lands of the West, nine or ten feet is better. Make the hills the same distance apart both ways, and the rows perfectly straight. It is a great mistake to have the hills crowded, as they often are in some yards, to seven feet each way, or even less.

"The sets for planting, are runners from old vines, which can be had from any old yard. Care must be taken to keep the sets from *male* plants separate from the others. The hop is a *diocious* plant, that is, having the staminate or male, and pistillate or female flowers, on separate plants. There should be about one male hill to every eight hills, each way, or one in sixty four, making from eight to twelve to the acre. These hills should be marked by a stake at planting, to enable one to distinguish them at a glance. The sets should be cut to two pair of eyes each, (if very short-jointed, three pairs of eyes may be left,) and three to five of these should be put in a hill, according to the condition they are in. They are usually planted in a furrow made by a plow, which must be from two to four inches deep, according as the soil is light or heavy. If planted too deep, they will not come up well. Sets are usually sold by the bushel; two to three bushels for an acre. When yards are planted with good, fresh sets, and it is done early, there is very little risk of failure. Often large yards are planted without losing a single hill. When the ground is very mellow, with but few stones, dibble the holes just deep enough to let the sets be under the ground, and three or four inches apart; press the soil around them, and mark the place with a stick.

**"CULTIVATION THE FIRST YEAR.**—The cultivation consists in keeping the weeds down, and the ground mellow. One day's work in season, is better than two later. If good sets are used, and they are planted very early, it will pay to raise a crop the first year, and the plants will be the better for it. Set one stake to each hill, and let *all* the vines run upon it. The stake should be but eight feet long, and set one foot in the ground; if longer than that, the vines will not get to the top in season to "*hop*" well. It is best to stake the plants, because then they are out of the way in cultivating the yard, and do not get torn off. We raise from 200 to 400 pounds to the acre the first year, at no cost, except picking and drying, besides the cultivation, which must be done if none are raised. The stakes may be pieces of old hop poles, or better,  $1\frac{1}{2}$  inch square sawed



stuff, eight feet long, (there is one foot board measure in each stake.) It pays well to get gas tar, which costs but \$1 or \$2 per barrel. Heat it in a pan made for the purpose, and dip the whole stake into it while it is hot. This makes a firm coat of paint on the stake, protects it from the weather, and at the same time is very offensive to insects, and plant lice will not lay their eggs on it in the fall. In the autumn of the first year, a covering of two forkfuls of coarse manure should be given the hills, and if there is any chance of water standing on the surface, furrows must be plowed for surface drains, for it will kill the hills it covers. Cattle should never be pastured in hop yards in the fall, especially not in young yards. There should be no grass for them to eat, though there too often is.

"TRAINING.—Throughout the hop region of New York, young trees have been cut, for many years, for use as hop poles. This has gone on until the price has risen from two or three cents to twenty or thirty cents each, and large quantities are brought from Canada, and the wilderness of Northern New York, by canal and rail, and then drawn with teams to the yards, frequently from ten to twenty-five miles. Hardwood poles last from two to five years, the best cedar poles but ten, and many poles break down with their load, or are broken down by the wind every year, which causes a total loss of the hops on them, and frequently on one or two adjoining poles. The common method allows two poles, eighteen to thirty feet long, to each hill. Being so long, the wind whips them, breaking off many of the arms, so that often a considerable part of the crop is destroyed in this way. When the crop grown upon the poles is picked, many hills are killed, and all are injured by bleeding of the vines, which must be cut off.

"HORIZONTAL HOP YARD.—There is a new method in vogue in this State, which has been used in Otsego Co. to some extent for three years past, and the last year it was used all through this, and in some other States, viz., 'Collins' Horizontal Hop Yard.' I shall confine my directions for raising hops mostly to this plan, as I consider it as far superior to the common plan, with long poles, as the Mower and Horse-Rake are to the haying implements used by the last generation. There is but one stake to the hill, and this eight or nine feet long, and set one foot in the ground. The best and cheapest stakes are 1½-inch square sticks, sawed at any saw-mill, left rough, and entirely coated with coal tar. Where this plan is introduced into old yards, old poles, cut in two, are used; yet it is far better to use the square stuff above described, than to cut down a tree for each stake.

"The outer row of stakes should be eight or ten

feet outside of the outer row of vines, and where next a fence, put them on the line of it. These should be 2½ inches square, or if round, about as large as a common hop-pole, and set a little deeper than the others. For the inside hills, round stakes, an inch through, are as good as larger ones. The tops of all the stakes are connected by a twine running across the yard both ways—it is tied to the outer stakes only, and wound once around the inner ones. Use good twine—wool or broom twine, made out of hemp or linen. At the present price of twine, it is best to raise the flax and spin it; two or three threads making a small twine that will measure about 700 feet to the pound; this is strong enough, and lighter is often used, and if tarred with good pine tar, it will last several years. Tarred hemp twine at present costs 25 to 27 cents per pound at wholesale in New York, and from 35 to 40 cents through the country. A kind should be used that will not weigh more than 25 pounds per acre; but I like best a good home-made twine, at about 15 pounds per acre. The cost of twine is at present from six to ten dollars for an acre, but four years ago it cost only three or four dollars.

"At the male hills, put one tall pole about 18 feet long, so that the male vines will run up it, and the wind can blow the pollen over the yard. The string should pass these poles free, so that the wind will not break the twine.

"The cost of preparing a yard in this manner is as follows: 750 feet lumber for stakes, at \$15@20; gas tarring stakes, \$2; 25 pounds twine, at 30 cents, \$7.50; setting stakes, \$1; putting on twine, 50 cents; right per acre, \$10. Total cost, after setting vines, \$36. Cost of yard with long poles, 1,400 poles, 20 cents each, \$280; sharpening, \$10; setting, \$7. Total cost, not counting hauling—after setting vines, \$297."

The directions for cultivating the hop yard the second year will be given next month.

LIME FOR WHITEWASH in the spring should be slaked now. Take quick-lime in lumps; start the slaking with hot water, and add more as needed to bring it to a creamy consistence. Do this in a half barrel or similar vessel; stir it well, cover and leave it in a still place, undisturbed until wanted for use. A crust of carbonate of lime will form on the surface; this will have to be skimmed off. Lime prepared in this way becomes smoother and softer, the gritty portions and particles imperfectly burned settle to the bottom, and the slaking is more complete than if slaked at the time it is used, and for nice work it is much preferable to lime slaked at the time it is wanted for application.—*American Agriculturist.*





### GARDEN WORK FOR APRIL.

APRIL is emphatically the gardener's seed time. It is not of the highest importance that any seeds should be sown in the open ground in March, only as we get some varieties disposed of, so that we shall not be too much crowded in April.

I never could get peas fit for the table much, if any, earlier by sowing in March, than in the early part of April. I have sown the Dan. O'Rourke variety all along from the 25th of March till the 12th of April, and have generally picked the first from the 13th to the 16th of June—the time of picking depending not so much on the time of sowing as on the state of the weather while they were growing.

If your lettuce, peas, onions, spinach, beets and radishes were sown last month, you will be ready to attend to the following varieties this month:—Asparagus, lettuce for succession, rhubarb, brocoli, brussels sprouts, cabbage, cauliflower, celery, cress, kale, kohl rabi, early turnip, radish for succession and potatoes.

Sow in hot-bed, tomatoes, celery, cucumbers and melons, and weed out those sown last month.

Cucumbers and melons should be planted on inverted sods, placed directly on the manure.

Cut tough sods, about six inches square and four inches thick, place them on the manure until heated through.

*Cucumbers.*—Sow Early White Spined and Early Russian, pretty thick on the sod, and cover about three quarters of an inch with loam. It is well to stick a small stick in the centre of the sod to mark its place.

*Melons.*—Sow Fine White Japan and Jenny Lind musk-melons, and Early Mountain Sprout and Goodwin's Imperial water-melons, the same as cucumbers.

*Tomatoes.*—The Early Smooth Red is the earliest, and the reader will find other varieties mentioned in the February number.

#### OPEN GROUND.

*Asparagus.*—Soak the seeds in warm water a few hours, and sow in drills  $1\frac{1}{2}$  inches deep and 15 inches apart. If the ground be rich, and they receive good culture through the season, they will be in best condition to transplant when one year old.

*Transplanting.*—One year can be gained by purchasing strong one year old plants at a nursery, at a cost of from one to two dollars per hundred. Two hundred roots will plant a bed large enough to furnish a liberal supply to a family of six. Dig trenches for the roots two feet apart and eight inches deep. Fork into the subsoil in the bottom of the trenches a good quantity of fine manure. Place the roots in the trenches 15 inches apart, and cover so that their crowns shall be four inches below the surface of the ground. This will admit of the surface being dug over every spring without disturbing the plants. About 20 lbs. of salt should be sown to the square rod. Old beds should have the manure spread on the surface last fall dug in.

*Rhubarb.*—Linnaeus is the best. Prince Albert and Victoria good. Sow in drills 15 inches apart, cover one inch deep, and when well started, thin to four inches. Transplant one year old plants this month, three feet each way. Plants raised from the seed will vary a little from the parent. The most certain way of getting the right kinds is to divide old roots. Rhubarb can be forwarded very much by placing a headless barrel over the hill, and surrounding it with warm manure. In cutting for use, leave a few stalks in each hill, to maintain the vigor of the plant.

*Brocoli.*—Sow Early Purple Cape and White Cape, in shallow drills eleven inches apart.

*Brussels Sprouts.*—Sow the latter part of the month, the same as brocoli.

*Cabbage.*—Sow in open ground, in the early part of the month, if without a hot-bed, those varieties mentioned last month for hot-bed. Towards latter part of the month, sow for fall and winter's use, Large Flat Dutch, Large Late Drumhead, Drumhead Savoy, and Large Late Blood Red, in very shallow drills, eleven inches apart. When up, thin to three inches.

Transplant the latter part of the month from hot-bed plants started last month. Eighteen inches each way will answer. An hour or two before transplanting, thoroughly saturate their bed, in hot-bed, with water, take up with trowel or the fingers, and set a little deeper than they stood in the hot-bed, and *press the earth firmly around their roots.*

*Cauliflower.*—Cultivate the same as cabbage.

*Celery.*—If not sown in hot-bed, should be started as soon as possible, in a rich, mellow bed.

*Cress.*—Curled Grass, Broad Leaved, and Broad Leaved Winter, are the sorts. Should be sown in shallow drills 15 inches apart.

*Kale.*—Cottager's is cultivated exactly like cabbage.

*Kohl-rabi.*—Sow Large Early Purple, Large Early White, and Large Late Green, any time from April to July, and treat the same as cabbage.



*Early Turnip.*—Sow Red-Top-Strap-Leaf, in shallow drills eleven inches apart, and thin to three.

*Potatoes.*—The latter part of the month, the Early Sovereign, Ash-Leaved Kidney, Early Cottage, and Early Dykeman, can be planted. A little horse manure under each hill will hurry them along.

#### SMALL FRUITS.

Look well to the small fruits. The large fruits are becoming so uncertain—the apple so often fails—the pear is suffering so much from the blight—the peach comes around not much oftener than the seventeen-year locusts—it certainly behooves the gardener to cultivate liberally those small fruits that are most certain to bear uniform crops.

*Currants.*—In some localities, the currant is becoming the least reliable of all fruits, owing to the ravages of the currant worm. Many have tried dusting the leaves with *hellebore*, with good success. If it is an effectual remedy, it cannot be too widely known, for this wholesome fruit has almost disappeared from Western New York. Red Dutch, Cherry, La Versailles, Prince Albert, White Dutch, and White Grape, are the best varieties. They can be started from cuttings, or roots can be procured at the nurseries. Transplant with care, using the fingers, freely, in adjusting the roots and working dirt among them. Old bushes should be hoed or dug around, and trimmed.

*Gooseberries.*—The English varieties are best, but unreliable on account of their tendency to mildew. The American Houghton Seedling is free from mildew, and uniformly productive, but inferior in size and flavor. Crown Bob, Roaring Lion, Red Warrington, Golden Drop, Green Ocean, and White Smith, are the better English sorts. The gooseberry likes a rich, moist, cool soil, and is improved by summer mulching and thorough pruning.

*Gapes.*—The Delaware, Concord, Hartford Prolific, and Isabella, are the better sorts. The Iona and Isabella—seedlings of Dr. Grant—are very promising new varieties, and in some localities the Diana and Rebecca are excellent. The soil should be deep, rich and dry. About six feet apart is the distance for garden culture. Strong two-year old vines are the best for transplanting. Cut back to two eyes. To make the greatest growth of vine, tie them up perpendicular. Old vines will bear best by being trained horizontally.

*Strawberries.*—Jenny Lind, Bartlett, Triomphe de Gand, Vilson's Albany, and Russell's Prolific, are the better sorts. If the gardener makes up his mind to cultivate in hills, cutting off the runners weekly—by which method the largest crops are realized—transplant 18 inches each way, keep the weeds down, and as the berries commence ripening, strew a little cut straw, marsh hay, saw-dust, or tan-bark

between the hills, to keep the berries clean and retain the moisture in the ground. They will bear, lightly, the first year, and a full crop the second and third years. If the runners are *not* to be kept cut off, plant in rows three feet apart, 15 inches in the row, allowing the runners to extend one foot on each side. That will leave a path a foot wide between the rows, to admit of cultivating the plants, and picking the fruit without treading on the vines.

*Raspberries.*—Old plantations, if not attended to last fall, should have the old canes broken out, and the weaker new ones cut, leaving four to six of the stronger ones to bear fruit. In making new plantations, the Doolittle, or Improved Black Cap is hardy and productive, while among red and yellow varieties, the Red Antwerp, Fastolf, Franconia, and Brinckle's Orange, take the lead. Plant in a rich soil, four feet each way, and cut down the canes to within four to six inches of the ground.

*Blackberries.*—Old plantations should receive similar treatment to raspberries, and new ones made of Dorchester, New Rochelle, and Newman's Thornless. About New York they have a new variety, which they highly commend, called Kittany. I presume that W. S. Carpenter, of New York, could furnish it to amateurs.

If every one should produce a surplus of the small fruits, canning them, the failure of large fruits would not be so great a loss.

P. C. R.

#### DESTROY THE CATERPILLARS NOW.

THE American tent caterpillars or lackeys, so destructive to the early foliage of wild cherry trees and apple trees, become moths in July, and lay their eggs on the twigs of the wild cherry and apple in July and August, as represented in the accompanying cut.



Various methods for the destruction and extermination of these pests are resorted to by thrifty and enterprising farmers and gardeners; and, to be successful, they should be universal. One of the most effective methods to prevent their ravages, is to seek the eggs of the moths during these fine spring mornings, which, when found, as they easily may be, especially in young orchards, clip the twigs wherever they are deposited with a sharp instrument, and burn them.

Nurseries may thus be cleared of them. Shears and a knife, with basket in which to place the twigs, and a ladder, are the equipments necessary for this important work. Let



it be done this month, as farmers have more time to attend to it, and besides it is less and pleasanter work than after the eggs are hatched into devouring worms, for then is seed time pressing with its multifarious demands for labor. Not only apple trees, but all the wild cherry trees on and about the farm premises, should be thoroughly, diligently, and most carefully searched, that this evil may be prevented in its embryonic state.—*Boston Cultivator*.

### EARLY MELONS AND SQUASHES.

MELONS, cucumbers and squashes, as gardeners well know, are very difficult to transplant. Their roots quickly spread in every direction, and they are sensitive to the mutilation they must necessarily receive when the work is done in the ordinary manner. Various expedients have been resorted to. One, which has succeeded tolerably well, is to plant the seeds in an inverted piece of turf, embedded in the earth of a hot-bed, and before many leaves are made, to remove the young plants, with the pieces of turf, to the open ground. There are but two difficulties here. The turf does not allow the plants to become large enough before removal; and grass is apt to spring up from the pieces.

A better way is to make small open baskets, set them in the hot-bed, and plant the seeds within them. The baskets do not impede the roots, and when the plants are large enough, the whole, basket earth and plants, is removed and set in a hole previously cut in open ground. The baskets are



Fig. 1.

Fig. 2.

Fig. 3.

easily made by tying together with twine, as shown in fig. 1, two basket splints, basswood or other bark; then with another piece tied together at the ends, form the hoop, fig. 2; thirdly, bring the ends of the two first mentioned pieces down over this hoop, tying by twine, and the basket is made, (fig. 3.) If the soil is light and friable, it will be necessary to interweave a few more splints or twigs; but if tenacious, a more open basket will do. An active hand will make many of these baskets in an hour; and they will not only give earlier results, but save largely from squash bugs and other insects.—*Rural Affairs*.

ORCHARDS on northern slopes are, as a general rule, less liable to injury from the vicissitudes of the weather than those on southern slopes. One reason of this is that the buds do not start so early in the spring, and are therefore less likely to be affected by the cold winds and frosts of early spring.

### GARDEN WORK.

*THE Gardeners' Monthly* gives some good hints for garden operations, a part of which we quote:

Preparing ground is, of course, the first thing in order.

If flowers have been growing in the ground for many years, new soil does wonders. Rich manure makes plants grow, but they do not always flower well with vigorous growth. If new soil cannot be had, a wheelbarrow of manure to about every fifty square feet will be enough. If the garden earth looks grey or yellow, rotten leaves—quite rotten leaves—will improve it. If heavy, add sand. If very sandy, add salt—about half a pint to fifty square feet. If very black or rich from previous year's manurings, use a little lime, about a pint slacked to fifty square feet.

If the garden be full of hardy perennial flowers, do not dig it, but use a fork, and that not deeply.

Dig garden ground only when the soil is warm and dry. Do not be in a hurry, or you may get behind. When a clot of earth will crush to powder as you tread on it, it is time to dig—not before.

If perennial plants have stood three years in one place, separate the stools, replanting one-third, and give the balance to your neighbor who has none.

Set out the annuals you may have got forward in windows or frames—that is the hardy ones. The plan used to be to set out in a shower; but that plan is barbarous. No wonder with such old fogyish rules our handsome young ladies are disgusted with gardening. Let the girls lift the seedlings carefully from the soil in the pots, set the roots in a saucer of water, take them to their assigned places in the garden, and from the water dibble them at once in. Cover for twenty-four hours with an inverted flower-pot—next day cover only six hours during the middle of the day,—next but an hour or so during hot sun, if there be any; and the plant is safe. Study the differences between hardy and tender annuals. The latter must be set out only in April. In the North—extreme north—also of course, our rules are too early. Go by the season not the almanac. Plants that have been covered by leaves may be undressed if they show signs of growth, which is the best rule for uncovering all kinds of protected plants.

Prune shrubs, roses and vines. Those which flower from young wood, cut in several to make new growth vigorous. Tea, China, Barbon and Noisette roses are of this class. What are called annual flowering roses, as *Prairie Queen* and so on, require lots of last year's wood to make a good show of flowers. Hence, with these, thin out weak wood, and leave all the stronger.

To make handsome, shapely specimens of shrubs,



cut them now into the forms you want, and keep them so by pulling out all shoots that grow stronger than the others during the summer season.

Do not transplant extensively till the ground is warm and the buds are about to push. Many things die by exposure to winds for a few weeks before they have warmth to push roots and leaves into growth.

The rule for pruning at transplanting, is to cut in proportion to apparent injury to roots. If not much the worse for removal, cut but little of the top away. Properly pruned, a good gardener will not have the worst case of a badly dug tree to die under his hands. In a nursery, where these matters are well understood, trees "never die."

Box edgings lay well now. Make the ground firm and level, plant deep, with tops not more than two inches above ground.

Roll the grass well before the softness of a thaw goes away. It makes all smooth and level.

Graft trees or shrubs where changed sorts are desirable. Any lady can graft. Cleft grafting is the easiest. Split the stock, cut the scion like a wedge, insert it in the split, so that the bark of the stock and scion meets; tie a little bast bark around it, and cover with Trowbridge's Grafting-wax, and all is done: very simple when it is understood, and not hard to understand.

#### BLIGHT IN PEARS.

At a recent meeting of the Ohio Pomological Society, Dr. Kirtland is reported as having talked of a new theory concerning the pear blight, based upon microscopic investigations by Professor Salisbury, showing that this disease is caused by the propagation and growth of minute fungi in the sap and alburnum of the trees, and giving facts supporting the theory. As a remedy or preventive of these disease in fruit trees, Dr. K. said the use of copperas, in solution, as a wash for the bark, or syringing the leaves and fruit, was found very valuable; also the application of old iron, blacksmiths' sweepings, etc. to the roots. He expressed strong confidence that these applications would be found a complete remedy for the fire-blight in pear trees, that worst scourge of the pomologist. — *Gardeners' Monthly*.

We have no doubt that the blight is caused by a fungus in the sap and alburnum of the trees. And we think that the origin of this fungus is from decaying root and other woody matter in the soil. We have but little hope, however, that any external application will arrest the disease. Better use means to remove the cause. In the Rural Annual and Horticultural Directory for 1865, we have given our views on this subject more in detail.

#### DIANA GRAPES.

W. C. STRONG, of Brighton, Mass., has in the *Gardener's Monthly* an article on Winter Grapes, in which he says of this grape:

But the grape of all others, which with certainty and with little care, remains plump and sound the whole live-long winter, is the Diana. This is the winter grape par excellence. With us it is rather late in maturing, and this with some inequality; some of the berries in each bunch being scarcely ripe at the very close of ordinary seasons. Yet I have found these scarcely matured berries become quite eatable in mid-winter,—not equal to those fully colored, but very passable. The excellent keeping qualities of this kind depend undoubtedly upon the thickness of its skin. This is such a protection to it, that with the most ordinary care it keeps more perfectly than the Baldwin apple. I should treat them simply as follows: Cut them just to avoid the frost; trim out all imperfections; pack closely, single layers in shallow boxes or drawers; leave them open in a cool room for a few days to allow moisture to pass off; then close and keep in a cold dry room until April, if you consult your purse and can govern your appetite so long a time. The quality of the Diana is universally esteemed. It will ride any distance to market. When its keeping qualities are taken into account, is it not worthy of more attention?

THE Gardeners of Scotland have determined to hold in Edinburgh, in the month of September next, a Great International Fruit and Flower Show, in connection with the Horticultural Society of Edinburgh. The exhibition is fixed for the 6th of that month. In the class of foreign grown fruits, £5 are offered for collections of grapes, pears and of apples. In the class devoted to home-grown fruits, there are 54 prizes offered for grapes, 14 for general collection of fruits, 9 for pineapples, and others in proportion. The London *Gardener's Chronicle* says "the display of grapes alone would be worth a journey to Edinburgh to see."

LADY BUGS.—Whatever else you destroy in the insect line, never injure a lady bug; for in its larvæ, its pupa, (two stages of its metamorphoses,) and its insect states, it feeds upon the *aphis*, (the plant-louse or "vine-fretter,") that is so pestilent in gardens and green-houses, and even in window-gardening among parlor plants. Every child knows the lady-bird as well as the zoologist, who calls it "celeopterous," that is, sheath-winged—having its wings under cover of a pair of shells running longitudinally. The wings are of various brilliant colors, generally between orange and deep red. It belongs to the same genus of insects as the beautiful cochineal.



## Ladies' Department.

### LITTLE FOXES.

MRS. STOWE, in her "Chimney Corner Papers" in the *Atlantic Monthly*, has some excellent talks on the "Seven Little Foxes" which eat the vine of domestic happiness. Fault-finding is the first she treats of.

"Fault-finding—a most respectable little animal, that many people let run freely among their domestic vines, under the notion that he helps the growth of the grapes, and is the principal means of keeping them in order.

"Now it may safely be set down as a maxim, that nobody likes to be found fault with, but everybody likes to find fault when things do not suit him.

"Let my courteous reader ask him or herself if he or she does not experience relief and pleasure in finding fault with or about whatever troubles them.

"This appears at first sight an anomaly in the provisions of Nature. Generally we are so constituted that what it is a pleasure to us to do it is a pleasure to our neighbors to have us do. It is a pleasure to give, and a pleasure to receive. It is a pleasure to love, and a pleasure to be loved; a pleasure to admire, a pleasure to be admired. It is a pleasure also to find fault, but *not* a pleasure to be found fault with. Furthermore, those people whose sensitiveness of temperament leads them to find the most fault are precisely those who can least bear to be found fault with; they bind heavy burdens and grievous to be borne, and lay them on other men's shoulders, but they themselves can not bear the weight of a finger.

"Now the difficulty in the ease is this: There are things in life that need to be altered; and that things may be altered, they must be spoken of to the people whose business it is to make the change. This opens wide the door of fault-finding to well-disposed people, and gives them latitude of conscience to impose on their fellows all the annoyances which they themselves feel. The father and mother of a family are fault-finders, *ex officio*; and to them flows back the tide of every separate individual's complaints in the domestic circle, till often the whole air of the house is chilled and darkened by a drizzling Scotch mist of querulousness. Very bad are these mists for grape-vines, and produce mildew in many a fair cluster.

"Children are more hurt by indiscriminate, thoughtless fault-finding than by any other one thing. Often a child has all the sensitiveness and all the susceptibility of a grown person, added to the faults of childhood. Nothing about him is right as yet; he is immature and faulty at all points, and everybody feels at perfect liberty to criticize him to right and left, above, below, and around, till he takes refuge either in callous hardness or irritable moroseness.

"A bright, noisy boy rushes in from school, eager to tell his mother something he has on his heart, and Number One cries out—

"Oh, you've left the door open! I do wish you would n't always leave the door open! And do look at the mud on your shoes! How many times must I tell you to wipe your feet?"

"Now there you've thrown your cap on the sofa again. When will you learn to hang it up?"

"Don't put your slate there; that is n't the place for it."

"How dirty your hands are! what have you been doing?"

"Don't sit in that chair; you break the springs, jouncing."

"Mercy! how your hair looks! Do go up-stairs and comb it."

"There, if you have n't torn the braid all off your coat! Dear me, what a boy!"

"Don't speak so loud; your voice goes through my head."

"I want to know, Jim, if it was you that broke up that barrel that I have been saving for brown flour."

"I believe it was you, Jim, that hacked the edge of my razor."

"Jim's been writing at my desk, and blotted three sheets of the best paper."

"Now the question is, if any of the grown people of the family had to run the gauntlet of a string of criticisms on themselves equally true as those that salute unlucky Jim, would they be any better natured about it than he is?"

"No; but they are grown-up people; they have right that others are bound to respect. Everybody can not tell them exactly what he thinks about everything they do. If every one could and did, would there not be terrible reactions?"

RICE PUDDING.—In a former paper you have an article from the *Prairie Farmer* about making rice pudding without eggs. We never use eggs; our plan is as follows: We wash a half pound of rice, and put it in a broad, shallow tin pan holding four quarts, (we have a large family,) with a large teacupful of sugar and a half teaspoonful of salt. Fill the pan up with milk, fresh from the cow is best, and set in the oven or stove to bake, stirring it occasionally and trying the rice. When the latter is soft and begins to thicken the mix, the pudding is done. If it boils too long, or there is too much rice in it, it will be too thick to be good. You can spice it if you choose. It is excellent.—E., in *German town Telegraph*.

SALLY LUM.—Three pints of flour, three teaspoonful of cream-tartar, one and a half teaspoonful of soda, butter the size of two eggs, a cup of sugar, four eggs, a pint and a half of milk. Rub the cream-tartar into the flour, and dissolve the soda in the milk. Bake in round tins like cake.

APPLE FLOAT.—One pint of stewed apple, strained, and the white of one egg. Beat them together until the mixture is as light as whipped cream, and fill in jelly glasses. A very handsome dish for dessert.

HOW TO KEEP HOP YEAST FROM SOUING IN HOT WEATHER.—Stir into the yeast as soon as it is ready to set away after being made, one tablespoonful of common salt for every quart of yeast.



## THE WRESTLERS.

## A GAME FOR CHILDREN.

**MATERIALS.**—Two large corks, some thin card-board, small pieces of various materials, water-colors.

This game consists of two small heroes in cork and card-board, to whom a piece of thread about three

yards long is attached, causing them to put themselves into all sorts of contortions. This thread (whether white or black it should be very strong) is passed through the crossed arms of the little men, and is fixed at one end to the floor by means of a small nail or tack, while the other end is held in the hand, rather slanting. By slightly drawing the thread, the move-



ments of the wrestlers are rendered easier; but practice alone will teach this, and we must warn our readers not to draw the thread too tightly, as this would cause the little men to fight to desperately. Let us now explain how they are to be made: Take for the bodies good corks, three and a half inches long. They

must be of the same size and *the same weight*, as it is necessary for them to keep their equilibrium. A *face* should be painted on the top of the corks (it is unnecessary to have a great talent for painting to do this.) Next, they must be dressed. A strip of linen two inches long, and gathered round the figures, serves for

Fig. 2.—The Leg.



Fig. 3.—The Arms.



a skirt; it is fastened by pins. The under part of the body is hidden by a small piece of black silk; it is fastened to the skirt, which is pulled down tightly underneath. The toilet is completed by a band made with a colored ribbon, and by a little cap, the shape and color of which may vary according to the taste of the worker, and which is also put on with pins. Next cut

out the arms and legs in thin card-board from the illustrations 2 and 3. As the arms are drawn crossing each other, two similar pieces only should be cut out, but four legs are required. The part represented black in the pattern for the legs is covered with India ink, and the two pieces for the arms are painted in water-colors, as well as the shirt-sleeves. A pin is inserted in each



leg, and the same pin is fastened on each side of the wrestler's body, so that it may move easily. The arms are attached in the same manner to the shoulders, and in a very horizontal position. As a general rule these small dolls should be well poised, and every fold in their dress which might impede their movements carefully avoided. Now pass the long thread through the arm at the place marked by a small round, and fasten this thread to the floor in the manner already described, and make a knot in the thread about one yard from the end, to prevent the wrestlers from slipping about too much.—*Godey's Lady's Book.*

### CLEAN HANDS.

WHEN I was about six years old, a gentleman, who had called on my father to transact some business, perceived that my hands were dirty, and those of my brother Fred in the same condition.

"My boys," said he, "I hate dirty fingers; now if yours are clean when I call here again next Tuesday, I will make you a present."

As soon as it was light on the Tuesday morning, my brother and I got up and began to wash our hands. We used more soap that morning than we had used for a month before, and if ever our hands were clean they certainly were then. The gentleman did not come till dinner time, so we thought it better to have another scrubbing at our hands, and once more we were up to our elbows in soap-suds. The gentleman came, and after examining our hands, which had not a speck on them, he gave each of us five new, bright, sparkling pieces of coin, which we took to be golden guineas. They were only pocket pieces—but we were too young to know the difference—they were just as valuable to us, so we fancied ourselves to be as rich as Jews.

"Now, my boys," said he, "you see it is possible to keep your hands clean when it answers your purpose to do so. I should be ashamed of a boy who would be mean enough to wash his hands to make money, and not keep them clean to make his parents and friends comfortable. The love and good opinion of your parents and friends are worth all the money in the world."

I never forgot this good advice, and now record it that others may derive as much advantage from it as I have done.—*Juvenile Library.*

**PERSONAL APPEARANCE.**—Attention to one's outward appearance is one of the first elements of politeness. Want of cleanliness, slovenly or dilapidated attire, are an affront to the persons we approach. Anything like dirtiness—the very word offends—is utterly unpardonable and inadmissible. Man, naturally the nudest of animals, has necessarily the greatest need of personal neatness. Most of the nations of antiquity bathed daily, or oftener. Ablutions were, and still are, in many countries, a religious practice. Perfumes are quite gone out of fashion, being left to be used almost exclusively by persons of questionable health, or worse, of questionable character.

### GOOD NIGHT AND GOOD MORNING.

BY R. M. MILNES.

A fair little girl sat under a tree,  
Sewing as long as her eyes could see;  
Then smoothed her work and folded it right,  
And said, "Dear work, good night, good night."

Such a number of rooks came over her head,  
Crying "Caw! caw!" on their way to bed;  
Said she, as she watched their curious flight,  
"Little black things, good night, good night!"

The horses neighed, and the oxen lowed;  
The sheep's "Bleat! bleat!" came over the road,  
All seeming to say, with quiet delight,  
"Good little girl, good night! good night!"

She did not say to the sun, "good night!"  
Though she saw him there, like a ball of light;  
For she knew he had God's time to keep  
All over the world, and never could sleep,

The tall pink foxglove bowed his head;  
The violets curtsied and went to bed;  
And good little Lucy tied up her hair,  
And said, on her knees, her favorite prayer.

And while on her pillow she softly lay,  
She knew nothing more till again it was day;  
And all things said to the beautiful sun,  
"Good morning! good morning! our work is begun!"

### THE DANDELION.

"UGLY flower! I won't pick you!" said little Harry, as he pulled the daisies and buttercups in the meadow, and suddenly came to a fine large dandelion. The dandelion had done its best to look bright and gay all day, and it was very sad to hear its happy broad golden face found fault with like this.

"I wonder why nobody likes me?" it thought sadly; "every other flower is taken notice of, and I am left neglected and forlorn. I did not make myself, and I do not wish to be disagreeable. I wonder if any body will ever care about me, or shall I shut up my petals and die?"

"No, no," whispered the breeze which passed over it, "keep on hoping."

And just then a large bee came buzzing through the long meadow grass, and it rested on the yellow dandelion, and found some honey in its heart, and said, "Beautiful flower, I am glad I found you out;" and the dandelion held up its golden face to the sun, and said, "I have not lived for nothing."

God has given us all the power of being a comfort to somebody.

WHY does a duck go under water? For *divers* reasons. Why does the same duck come out of the water? For *sun-dry* reasons.

WHEN is a cigar like an old maid? When there is no match for it.

WHAT best describes and most impedes a pilgrim? Bunyan.

WANTED.—A firkin of butter churned from the milk of roses.

WHEN is a cat like a tea-pot? When your tea's in it.

A CHEERFUL MEASURE—The horn of plenty.



## Miscellaneous.

### ENOCH ARDEN: BOILED DOWN.

Philip Ray and Enoch Arden  
Both were "spoons" on Annie Lee;  
Phil did not ful-fill her notions,  
She preferred to mate with E.

Him she wedded and she bore him  
Pretty little children three;  
But becoming short of rhino,  
Enoch went away to sea.

Leaving Mrs. Arden owner  
Of a well-stocked village shop,  
Selling butter, eggs and treacle,  
Beeswax, whipcord, lollipop.

Ten long years she waited for him,  
But he neither came nor wrote;  
Wherefore, she concluded, Enoch  
Could not longer be afloat.

So when Philip came to ask her  
If she would be Mrs. Ray,  
She, believing she was widowed,  
Could not say her suitor "nay."

And a second time was married,  
Gave up selling bread and cheese,  
And in due time Philip nursed  
A little Ray upon his knees.

But, alas! the long lost Enoch  
Turned up unexpected-ly,  
And was vastly disconcerted  
By this act of bigamy.

Yet, reflecting on the subject,  
He determined to atone,  
For his lengthened absence from her  
By just leaving well alone.

Taking to his bed, he dwindled  
Down to something like a shade;  
Settled with his good landlady,  
Next the debt of Nature paid.

Then, when both the Rays discovered  
How poor Enoch's life had ended,  
They came out in handsome style, and  
Gave his corpse a fun'ral splendid.

This is all I know about it,  
If it is not sufficient, write  
By next mail to Alfred Tenny-  
son, P. L., the Isle of Wight.

**DISAPPOINTED.**—A man applied to Dr. Jackson, the celebrated chemist, with a box of specimens. "Can you tell me what this is, sir?" "Certainly I can, sir; that is iron pyrites." "What, sir?" (in a voice of thunder.) "Iron pyrites." "Iron pyrites! And what's that?" "That's what it is," said the chemist, putting a lot on the shovel over the hot coals, where it disappeared. "Dross." "And what are iron pyrites worth?" "Nothing." "Nothing! Why, there's a woman in our town who owns a whole hill of that—and I've married her!"

**HEAVEN** bless the wives! they fill our hives with little bees and honey. They ease life's shoeks, they mend our socks, but don't they spend the money? When we are sick they heal us quick—that is if they do love us; if not we die, and yet they cry, and raise tombstones above us."

**AN** urchin suffering from the application of the birch, said: "Forty rods are said to make a furlong. I know better; let anybody get such a licking as I've had, and he'll find out that one rod makes an *achre*."

### DISSOLVING GENEROSITY.

HERE is the last illustration given by Mons. Alphonse Karr, the celebrated French writer:

"I have for my neighbor, in the country, a man who recently was seized with congestion of the brain. His old servant became alarmed, and had scarcely time to scream for help when she fainted. A workman named Norman went by, he leaped into the window, lifted up the two dying people from the floor, restored the woman to her senses, jumped on a horse, galloped to town and brought back a physician. My neighbor's life was saved. The workman returned to his task. I said to my neighbor: 'But for Norman you would have been a dead man. I hope you intend to reward him liberally?' 'Yes, indeed, I intend to give him forty francs.' I met my neighbor a few days afterwards, and said to him: 'Well, have you rewarded Norman?' 'No, not yet, but he will lose nothing by waiting. I said I would give him ten francs, and when I say a thing it is as good as done.' A week passed away. 'Have you seen Norman?' 'Norman—ah! Norman! No, I haven't met him yet; but I am fattening a rabbit—a first-rate rabbit. Oh, I'm not a man to forget a service.' A fortnight passed away. 'Well, is your rabbit fat?' 'As fat as a partridge. I ate it yesterday, and, I tell you, it has been a long while since I had such a tid-bit in my mouth.'"

THE recent report of a committee on grapes to the Ohio Horticultural Society thus sets forth the qualities of some seedlings that have been injudiciously named: "It appears to the committee that Lydia was rather acid, and Mary was pretty good, with a thick skin, and that Ellen was rather sub-acid, with a catawba flavor."

A LADY that would please herself in marrying was warned that her intended, although a good sort of a man, was very singular. "Well," replied the lady, "if he is very much unlike other men, he is much more likely to be a good husband."

THE brother of Beethoven signed his name to distinguish himself from his lawless brother, "— von Beethoven, landowner." The immortal composer retorted by signing his, "Ludwig von Beethoven, brain-owner."

WHEN you see a man on a moonlight night trying to convince his shadow that it is improper to follow a gentleman, you may be sure that it is high time for him to join a temperance society.

"WHEN are you sure the smugglers have landed a cargo?" demanded a cockney of a custom-house officer. "When I seize it," replied the government punster.

**GENTILITY.**—There can not be a surer proof of low origin or of an innate meanness of disposition, than to be always talking and thinking of being genteel.

A DESPARING man tears his head. Old Jobus says an enraged woman is wiser—she tears her husband's.





### The Markets.

GOLD has fallen to 148. This has brought down the price of nearly all kinds of produce. Several failures are reported in New York, and there is a great panic among speculators, and a general uneasiness is felt in mercantile circles. There is a general desire to force sales, while, as is always the case when prices tend downward, buyers will purchase only what they need for immediate use. Pork, in New York, fell \$5.00 per barrel in one day!

In this city, owing to the great flood, little business is doing, and it is difficult to fix quotations. Clover seed sells for \$15.00 per bushel; timothy seed, \$6.00. Little is yet doing in potatoes, as the Eastern buyers have not arrived. They are sold in the stores at \$1.00 per bushel, but 75 cents is all that is paid for them. Butter is down 10 cents @ lb. It now sells for 35 cents. Apples are becoming scarce, and the price ranges from \$2.50 to \$3.00 per bushel.

### Geddes' Harrow.

At the request of Mr. Hamilton we republished last month, from a previous volume of the *Genesee Farmer*, a description of the Scotch, Geddes' and the common square harrow, written by the late J. H. Bixby. We have received two or three letters inquiring where the Geddes' harrow can be obtained. We believe it was invented by the Hon. George Geddes, of Syracuse, but we do not know where it is manufactured. Another correspondent, George L. Scott, of Darlington, Md., wishes to build one, and desires us to give him the length of the pieces, angle of mortice, and how far to put the teeth apart. We should be glad if some one would give Mr. Scott the desired information.

### "The Great Agriculturalist Strawberry."

OUR readers have all heard of this wonderful strawberry. There can be little doubt that it is all that is claimed for it in size, quality and productiveness. Of course it is not yet known how it will succeed in different localities, but it is certainly worthy of a trial. Mr. William S. Carpenter, of New York, will furnish genuine plants. See his advertisement on last page.

### Shares' Harrow.

WE stated last month, in reply to an inquiry, that we did not know where Share's harrow was manufactured. We have since learned that it is made by Whittemore, Belcher & Co., of Boston, Mass. It is an excellent implement, especially on sod land. It can be obtained from John Rapalje, of the Genesee seed store, Rochester, N. Y.

### Notes on the Weather from January 1, 1865, to March 1, 1865.

THE temperature and its extremes, storms and winds, special facts and results of comparisons, are objects of constant interest. As the weather of one half of a month often differs greatly from that of the other, the facts of the two halves are kept distinct, and the means and general averages are separate.

#### JANUARY, 1865.

	First half	Second half	Month.
Mean.....	23.32°	18.04°	20.60°
General average.....	25.83°	24.97°	25.84°
Highest temperature.....	37.00°	43.00°	
Highest mean.....	34.83°	36.33°	
Lowest temperature.....	4.00°	4.00°	Water, 2.83 in.
Lowest mean.....	14.00°	7.00°	

Before the end of the first week of January, sleighing was good over this section. The great snow-storm of the 10th and 11th was extensive, with snow nearly two feet perhaps, often greatly drifted, but sleighing good to the end of the month. Snow often fell. A cold half month, the mean being 5° below the general average for twenty-nine years.

The second half was only 1½° below the general average, and the cold not down to zero. A cold half month.

The range of the means of the first half of January is, in the twenty-nine years, from 15.9° to 36.7°, and the mean 25.5°; and of the second half is from 13.0° to 34.8°, and the mean 24.0°. From the least and greatest half monthly means, and from the monthly mean, the above table leads us to see the relative temperature.

#### FEBRUARY.

	First half	Second half	Month.
Mean.....	19.98°	23.62°	24.27°
General average.....	24.09°	27.24°	25.65°
Highest temperature.....	42.00°	50.00°	
Highest mean.....	36.67°	42.00°	
Lowest temperature.....	2.00°	2.00°	Water, 1.74 in.
Lowest mean.....	9.00°	18.00°	

The first half of February was cold also, about 5° below the general average, and the second half was about 1.3° below the average. Another cold month. Sleighing continued, for the snow was often added, and a greater body of snow on the ground than had been seen for years. On the 14th the cold was 1° or 2° below, and on the 15th, at the second half, the heat was 2°. Two cold months of winter.

The range of the means in the first half of February was from 18.5° to 35.1°, and the mean 24.9°; and of the second half the range was from 12.1° to 38.0°, and the mean 27.2° in the twenty-nine years. The relative coldness is obvious on comparison.

February 20, near eight P. M., a splendid arch of aurora borealis across the north, the eastern part farthest south, above 50° perhaps above the horizon and disappeared in half an hour. Same the night following.

A CORRESPONDENT of the *Genesee Farmer* at Dwight, Ill., thinks if his neighbors would take the *Farmer* he should see fewer straw-stacks burnt up in the fall!

STATE FAIRS.—The Illinois State Fair is to be held at Chicago September 4-9, inclusive. The New York State Fair for 1865 will probably be held at Utica.



**Inquiries and Answers.**

**SUBSTITUTES FOR HAY.**—I lost my spring-sown clover last year owing to the severe drouth. I repeated the sowing in the latter part of the summer, but it is a partial failure. What is best to be sown for cutting and making into hay this year? If oats, how many per acre? when are they best sown, and at what stage cut? If corn, the like questions. Pray oblige me with answers in your next issue of the *Genesee Farmer*. Many of your readers are in the same position as myself, and any of your suggestions on the matter would be most serviceable.—WM. COOK, *South Cayuga, C. W.*

We would sow either Hungarian grass or oats. As you may not be able to get the seed of the former, you had better sow oats. Would put on a little more seed than for an ordinary crop—say three to four bushels per acre. Cut as soon as the crop has attained its full growth, but before the seed is matured. If peas were sown with the oats, say three bushels of oats and half bushel of peas, the fodder would be more valuable, but it is a little more work to cut the crop. If the land is not rich enough, put on half a ton of bone-dust per acre, or 300 pounds of Coe's superphosphate. You can get the latter from James Fleming & Co., of Toronto. Sow it broadcast at the time you sow the seed.

**SUBSOIL PLOWING.**—Do you consider it advantageous to subsoil light sandy and gravelly banks? If so, what kind of subsoil plow do you recommend for the purpose; and for clay loams, and where to be had?—INQUIRER, *Sandwich, C. W.*

We should be glad to hear from our correspondents on this subject. Much depends on the character of the subsoil. We think, as a general rule, there would not be much advantage in subsoiling "sandy and gravelly banks." But there may be instances where a tenacious subsoil prevents the descent of the water, and in this case, in conjunction with underdraining, subsoiling would be very useful.

**HORSE PITCH-FORKS.**—I have every year a good deal of grass to cut, and I find, since the introduction of mowers, that the hardest part of haying is to pitch off the load by hand. I have lately been thinking of buying a horse pitch-fork; but I know little about them, having never seen one in operation, and might find it worthless. Will you, through the *Farmer*, give your opinion of the value of them, or request the opinion of some of your correspondents?—L. H. TILLOTSON, *Candaigua, N. Y.*

They are unquestionably very useful labor-saving inventions. You need not hesitate a moment about getting one. It will pay for itself in a couple of days. What say our correspondents?

**BREEDS OF PIGS.**—I would like to see an article in the *Genesee Farmer* on the different varieties of pigs.—R. B. CONN, *Meredosa, Ill.*

We should be glad if some of our correspondents would write a short description of some of the principal breeds of pigs. There are few men who could do it so well as Sanford Howard, if he could find the time.

**EGG BOUND.**—Will C. N. Bement, or some other of your correspondents, give us the reason or cause of hens getting "egg bound," as it is called. I had a young pullet the other day that could not discharge her egg. It was of ordinary size, and hung to her in a bag that enclosed it. Upon examination, I found a small hole in the bag at the end of the egg, and the egg being pushed in that direction came out without any trouble. It afterwards took two days' watching

and washing, and returning the bag inwards, (as it kept coming out every hour or so,) and now she seems to do well and to all appearances is all right. Some say she will die. Is it so? What is the remedy for a hen in this case?—J. T.

**Literary Notices.**

**AGRICULTURE OF THE UNITED STATES IN 1860.** Compiled from the Original Returns of the Eighth Census, under the direction of the Secretary of the Interior, by JOSEPH C. G. KENNEDY, Superintendent of the Census. Washington: Government Printing Office. 1864.

We are indebted to Mr. Kennedy for an early copy of this valuable work. It shows the agricultural productions of every county in the United States for the year 1859, and also, for the sake of comparison, a recapitulation of the returns of the previous census for 1850, by which we are enabled to learn the progress made in agriculture during the ten years previous to the war, with much other information of great interest and value. It is a work that deserves to be profoundly studied by every one who wishes to understand the resources of the country upon which we most depend for meeting the burdens which the war has entailed upon us. Mr. Kennedy has accomplished his arduous task with great ability. In his preface and introduction he takes broad and statesman-like views of the agriculture of the country, and is entirely free from that common fault of our public men—a disposition to indulge in extravagant laudation. We hope to make liberal extracts from the work in future numbers of the *Farmer*.

**WOODWARD'S COUNTRY HOMES.** By GEORGE E. & F. W. WOODWARD, Architects. New York: GEORGE E. & F. W. WOODWARD, 37 Park Row. 1865.

Messrs. Woodward are experienced practical architects, and their position as publishers of the *Horticulturist* and their acquaintance with the wants of country residents, should enable them to give us plans for "country homes" that will prove useful to those about to build. The book is published in superior style. There are over thirty designs of houses, stables, &c., many of which have been erected under the supervision of the authors. If there is any fault in the book, it is one common to this class of works—a want of detail in the descriptions of the plans.

**THE THREE SCOUTS.** By J. T. TROWBRIDGE, author of "Cudjo's Cave," "The Drummer Boy," &c. Boston: J. E. TILTON & Co. 1865.

The scene of this novel is laid in the South-west. The three scouts whose exciting exploits are described, were a Kentucky farmer, a negro, and a Dutchman. The latter is the best character in the book. His adventures as a pedler in the rebel lines are very amusing, and the character is well sustained throughout. The book has few literary merits, but as the scenes are those of our own day, in which we are all interested, few who commence to read will lay it down until it is finished.

**Goodrich's Seedling Potatoes.**

We would call the attention of our readers to the advertisement of Mr. D. S. Heffron, of Utica, N. Y., in regard to the seedling potatoes raised by the late C. E. Goodrich, of that city. There can be no doubt of the value of the varieties which Mr. Heffron names. The Early Goodrich and the Gleason are especially recommended by Mr. Heffron.

**The Greeley Premiums.**

THE award of the "Greeley premiums" is postponed until after the exhibition of the Horticultural Association of the American Institute, to be held the middle of September, the second Tuesday in November, and second Tuesday in December, 1865.



**Grain Drills, Gang Plows, &c.**

WE would call attention to the advertisement of Mr. Draper Stone, of this city. He is agent for the well-known grain drills, gang plows, plaster sowers, &c., of the Messrs. Brown, of Shortsville, N. Y. He will be found at John Rapalje's Genesee seed store on South St. Paul street. Give him a call.

**Smith's Seedling Gooseberry.**

THIS is a new American variety, brought out by J. W. Manning, the well-known nurseryman of Reading, Mass. It is a seedling of the Houghton, and like it is free from mildew and a great bearer. It is of superior quality and of a large size.

**Trial of Implements.**

THE prospects for a trial of implements by the New York State Agricultural Society the coming season are quite favorable. It will probably be held at Auburn.

**Oporto Grape Vines.**

THE stock of Sylvester's Lyon Port, two years old, is so nearly exhausted that no more is for sale except to agents selling Oporto vines.

M. M. W., of Quincy, Ill., writes under date of March 10: "In this section the winter has been very fine, but it is feared the recent cold snap will hurt the fruit. Winter wheat, it is believed, has not been injured by the want of snow as much as was expected."

**ADVERTISEMENTS.**

A FEW short advertisements of interest to farmers—and only such—will be inserted in the GENESEE FARMER at twenty-five cents a line, or \$2.50 per square, or \$25 per column, each insertion, payable in advance.

**THE GENESEE FARMER:**

A MONTHLY JOURNAL OF AGRICULTURE AND HORTICULTURE.

Published at Rochester, N. Y., by

JOSEPH HARRIS.

Terms—INVARIABLY IN ADVANCE—One Dollar a year.

**THE CLIPPER ONE-HORSE MOWER—**  
Adapted to every variety of surface and to cutting every kind of grass.

This machine is capable of cutting three-fourths to one acre of the heaviest grass per hour, and can be drawn as easily by one horse as ordinary two-horse mowers by two horses.

The height of cut can be varied by the driver while the machine is in motion, and without leaving his seat. It is simple, durable, and not likely to get out of order.

Two-Horse Mowers and Combined Machines of the same pattern. R. H. ALLEN & CO.,  
ap3t 189 and 191 Water street, New York.

**SUPERIOR FARM LAND!—20,000 ACRES AT LOW PRICES AND ACCOMMODATING TERMS.**—Franklinville Tract, Gloucester county, New Jersey, 25 miles south of Philadelphia on railroad running from Philadelphia and Camden to Cape May. In lots to suit purchasers. Circulars, with reports of SOLON ROBINSON, Hon. WM. PARRY, and others, with full information, sent free, by addressing JOHN H. COFFIN & CO., Franklinville, Gloucester county, New Jersey. Also, improved Farms from 20 acres upward. ap6t

**"RHODES"**—THE STANDARD MANURE for Tobacco, Corn, Oats, &c.; also, Top-dressing for the growing Wheat. Our spring supply of this long-established Manure ready for delivery. B. M. RHODES & CO.,  
Office 82 South street, Bawly's Wharf, Baltimore.

Or, H. E. MORING, General Agent for New York and New England, 113 Water street, near Wall, New York.

**Good Reading and Good Pictures**

For the Young. A first class

**ILLUSTRATED JUVENILE MONTHLY**

has long been needed. The want is now supplied by the New Magazine,

**Our Young Folks**

published by the subscribers. It is filled with

**FIRST-RATE STORIES,**  
**FIRST-RATE SKETCHES,**  
**FIRST-RATE PICTURES,**

and all sorts of entertaining and instructive reading. It is cheap, too, only Two Dollars a year. The January number is just published, and will be sent as a specimen for 10 cents. It ought to be in every house. Address

TICKNOR & FIELDS, Boston, Mass.

Get up a Club.

**GRAIN DRILLS.**

JESSUP'S PATENT, 1861, with or without Grass Seed Sower. First Premium at the New York State Fair, 1863.

**GANG PLOWS,**

With Grain-Seeder Attachment. A full supply, with or without the attachment, constantly on hand. Also,

**PLASTER SOWERS,**

With Grass-Seed Attachment. Manufactured exclusively by H. L. & C. P. BROWN, Shortsville, Ontario county, N. Y.

DRAPER STONE, Agent,

1t No. 19 South St. Paul street, Rochester, N. Y.

**RUSSELL'S AND BUFFALO**

**SEEDLING STRAWBERRY PLANTS.**—Russell's, 30 for \$1.00; 100 for \$2.00; 1000 for \$12.00; duplicates, \$10.00.—Buffaloes, \$1.00 per dozen, \$5.00 per 100.

**IONA GRAPE VINES.**—No. 1, one year vines, \$2.50; \$25.00 per doz. 1t J. KEECH, Waterloo, N. Y.

**200 BUSHELS OF TIMOTHY SEED**

NOW on hand at the Genesee Seed Store, Rochester, which I offer at the lowest market price.

100 bush. Red Top and Blue Grass.

50 bush. Orchard Grass.

1t

J. RAPALJE.

**FRESH SEEDS OF ALL KINDS.**

BY MAIL, PREPAID; ALSO,

**The New Strawberries, Grapes, Currants, &c.**

Priced Descriptive List will be sent to any address.

B. M. WATSON, Old Colony Nurseries, Plymouth, Mass. ap2t

**THE BUCKEYE HORSE-HOE**

**MAKES LABOR LIGHT.** Enclose stamp for PERPETUAL ALMANAC with cut, price, &c.

HEMAN B. HAMMON, Patentee and Manufacturer,  
ap1t\* Bristolville, Trumbull county, Ohio.

**GRAPE VINES—APPLE TREES.**

WHO wants Apple Trees and Grape Vines as large as can be safely transplanted? All such are invited to call at the Lyons Nursery, or address

ap1t E. WARE SYLVESTER, Lyons, N. Y.

**SEED DRILLS.**

I HAVE a good assortment of Seed Drills or Planters suitable for planting all kinds of Garden Seeds—Beans, Corn, &c.—Prices from \$8.00 to \$25.00.

ap1t

J. RAPALJE, Rochester, N. Y.

**A WELL PAYING BUSINESS** in their own townships, and free from risk, is offered by the **Auburn Publishing Co. to 1000 Book Agents.** Please send for a circular, &c., to **E. G. STORKE**, Auburn, N. Y., without delay. ap2t

**TRUE'S POTATO PLANTER**—A one-horse machine, doing all the work of planting potatoes at one operation. Saves the labor of twelve men. Manufactured by

J. L. TRUE, Garland, Maine, Patentee and Proprietor.

Send for a Circular.

feb3t

**TILE MACHINE.**

THE BEST MACHINE IN AMERICA. Send for a Circular containing description. A. LA. TOURETTE,  
ap65tf Waterloo, N. Y.



## A Household Treasure!

A real treasury of good things for Wives, Mothers, Daughters and Housekeepers is

**BEADLE'S DIME**

### HOUSEWIFE'S MANUAL:

Or, HOW TO KEEP HOUSE AND ORDER A HOME;  
HOW TO DYE, CLEANSE AND RENOVATE;  
HOW TO CUT, FIT AND MAKE GARMENTS;  
HOW TO CULTIVATE PLANTS AND FLOWERS;  
HOW TO CARE FOR BIRDS AND HOUSEHOLD PETS, ETC.

Housekeepers will find this little Text Book one of the most useful of companions. It is prepared with great care by Mrs. VICTOR, whose name is a guarantee for its excellence. It ought to find its way into every house.

Sold by Newsdealers generally; or sent PREPAID on receipt of price—TEN CENTS. Address

BEADLE & COMPANY, Publishers,  
118 William street, New York.

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## Ayrshires at Auction.

Will be sold on

**Tuesday, April 11th, at Southboro, Worcester  
County, Mass.,**

my entire herd of

**PURE BRED AYRSHIRE CATTLE,**

comprising sixty-five head of

**COWS, HEIFERS AND BULLS,**

including several valuable IMPORTED ANIMALS, and the choicest stock of my own breeding.

My farm is situated three miles from Southboro Station, on the Boston and Worcester Railroad.

Sale to commence at 10 A. M.

Catalogues now ready, and will be sent on application.

1t HENRY H. PETERS.

**"Cayuga Chief Mower and Reaper,"**

WITH

**"YOUNG'S IMPROVEMENTS,"**

**FOR 1865.**

Manufactured ONLY by

**BARBER, SHELDON & CO.,**

**Auburn, N. Y.**

Examine closely before buying, as there are others building the Cayuga Chief without "YOUNG'S IMPROVEMENTS."

Send for Descriptive Pamphlet.

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**THE PICTORIAL PHRENOLOGICAL JOURNAL** for JANUARY, FEBRUARY and MARCH, have 32 quarto octavo pages each, and beautiful illustrated Covers. They contain Portraits of Tennyson, Silliman, Sheridan, Cobb, Phillips, Susanna Wesley—Mother of John—an Indian Chief, Franz Muller, Miss Muggins, Miss Fury, the Princess of Wales, Florence Nightingale, A Group of Warriors—Hannibal, Julius Caesar, Pizarro, Cromwell, Charles XII, Frederick the Great, Scott, Wellington and Napoleon. The Great Surgeons of the World—Harvey, Abernethy, Jenner, Hunter, Cooper, Mott and Carnochan. Also, W. S. Landor, Mrs. Farnham, Mr. Clark, Mr. Kilbourn, Mr. Morrill, etc. Prof. Owen on the Brain; The Human Face; Pre-existence; with Ethnology, Prenology, Physiognomy, and Psychology. Gov. Fenton; Edward Everett, the Orator; Aristotle, the Philosopher; Major Davidson, the Patriot; Charles Fourier, W. H. Fry; The Races of Men; Caucasians, Mongolians, Ethiopians, American Indians, Malays, with Grouped Portraits of each, and a Map showing the Geographical distribution of the Races; How the Brain changes the Cranium: The Inscrutable; Foreseeing, and Seeing at Sea, etc.—All Double Numbers, with numerous Illustrations, sent by first post for 60 cents, or \$2 a year. Address Messrs. FOWLER & WELLS, 389 Broadway, New York. ap2t

## Corn and Bean Planter Combined.

WE are manufacturing one of the most successful Two-Rowed Planters now in use. One man and horse can plant either in rows or checks from 10 to 12 acres per day, and do the work well. The machine is easily managed, and is of light draft for one horse. It is one of the greatest labor-saving machines of modern invention. Patented August 14th, 1860.

The demand for this Planter has continued to increase, until scores of them are now in use in Western New York, Michigan and Canada West.

Cash price at the Factory, \$25.00, subject to alteration as stock and labor may require.

Please order early. Several orders came too late last year to be filled.

Orders with cash will receive prompt attention. A liberal discount made to merchants and agents.

For further description, send for circular.

ap WHITESIDE, BARNETT & CO., Brockport, N. Y.

## American Roofing Company.

### GREEN'S PATENT.

THIS COMPANY is now prepared to furnish one of the best articles of ROOFING ever introduced, consisting of a **STOUT MATERIAL** made **WATER-PROOF** by a **COMPOUND** of **INDIA RUBBER**, hardened by a coat of **METALLIC PAINT**, prepared expressly.

The **WHOLE FABRIC** has been thoroughly tested, is **WATER PROOF**, and unaffected by changes of weather.

It rolls up and unrolls like a piece of Oil Cloth.

It is designed for covering **RAILWAY CARS, STEAMBOATS, DWELLINGS, BARNs and SHEDS**. It can be laid down by any sensible working man.

It is cheaper than any known roofing of equal durability.

It can be seen in use and samples had by applying at the Office of the Company, No. 94 WALL STREET, NEW YORK.

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### JUST PUBLISHED.

A NEW EDITION OF THE

## YOUNG GARDENER'S ASSISTANT.

In one very handsome large 12mo. volume, neatly and strongly bound in extra muslin, full gilt back.

Price,.....\$2.00

Sent by mail free of postage on receipt of price.

This work has been universally commended by the Agricultural Papers of the country. It is written by a practical gardener, and is thorough and complete in every department.—Everyone who wishes to know how to manage a Fruit, Flower or Kitchen Garden successfully should read this book.

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Send for our CATALOGUE OF AGRICULTURAL AND HORTICULTURAL BOOKS. 1t

### GOODRICH'S

## NEW SEEDLING POTATOES.

I SHALL send out in early spring, for the family of the late lamented Rev. C. E. Goodrich, the following new Seedlings, viz: **GOODRICH'S CALICO, EARLY GOODRICH, and GLEASON**. The first two each at \$1.50 per peck, or \$5.00 per bushel; and the Gleason at \$2.00 per peck. Cash orders will be booked and filled strictly in the order received, till the limited stock of tubers is engaged.

No extra charge for packing, &c.

ap1t

D. S. HEFFRON, Utica, N. Y.

**"Cast all thy Cares on God:  
That anchor holds."**

**ENOCH ARDEN**—the poem from which the above quoted noble line is taken—is published in a neat pamphlet, containing three fine drawings by DARLEY and HENNESSY, and a portrait of the poet, TENNYSON. Price 25 cents.

For sale by all booksellers, or sent postpaid on receipt of price by the publishers.

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TICKNOR & FIELDS, Boston, Mass.

## THE TRUE CAPE COD CRANBERRY

FOR Spring Planting, for Upland and Garden Culture, and for Swamps. Under my method of cultivation the yield last season on upland was over 400 bushels per acre. Explicit directions for cultivation, with prices of plants, with Nursery and Seed Catalogue complete, will be sent to any address. Agents wanted. Seeds prepaid by mail.

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B. M. WATSON,  
Old Colony Nurseries, Plymouth, Mass.



# PROSPECTUS

OF THE

## URBANA WINE COMPANY.

INCORPORATED UNDER THE GENERAL LAW  
OF NEW YORK.

HAMMONDSPORT, STEUBEN COUNTY, N. Y.

Capital \$250,000.—Shares \$100 Each.

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ANDREW J. SWITZER,.....Hammondsport, N. Y.  
Counsel,.....HARLO HAKES.

This Company is formed for the purpose of manufacturing wines and brandies from the grape, and for the production and culture of the best known varieties, at and near Hammondsport, in the county of Steuben, and State of New York.

The Company has purchased the following property, all situated in the very heart of the vine-growing district:

#### No. 1.

Fifteen acres and 25-100, known as the Bell & McMaster Vineyard, which is one of the oldest and most successfully cultivated vineyards in the region. A portion of this vineyard was set in spring of 1857, and has both Isabellas and Catawbias in full bearing.

#### No. 2.

The property known as the A. J. Switzer & Co. Vineyard, containing about thirty-five acres on the shore of the Crooked Lake, on which about twenty-four acres are now set to Isabellas and Catawbias, including one acre of Delawares, set in spring of 1862.

Five acres of this vineyard will be in full bearing the next season, and ten acres more come into bearing then for the first time.

#### No. 3.

The property known as the Pine Point Farm, containing one hundred and sixty-eight acres of the choicest grape land, situated on the shore of the Crooked Lake, on which about twenty acres were set in spring of 1863.

All of this property has been selected with great care, and has been critically examined by competent and scientific men and pronounced of the first quality, and possessing the requisites of soil, exposure and climate essential for successful culture.

On this last named property is about ten acres of land, forming a point, with a steamboat landing and suitable and ample place for the manufactories, vaults and buildings of the Company.

This property is all situated on the hill-side, with a south-eastern exposure, and is contiguous to the lake and immediately on its shores.

The soil is dry and gravelly, resting upon calcareous rock. It requires no under drainage and very little manure.

The climate at this place is remarkably mild and salubrious. Fruits of all kinds have been cultivated here in great perfection,

peaches and apriots ripening in the open air. The vine-growing district is embraced in a narrow strip of land on the slope of the hill-side, along the border of the lake, and the valley above its head, and an experience of over forty years demonstrates the successful culture of the grape here. The temperature is wholly different from that of the country adjacent, by at least ten degrees, and the Catawba and Isabella for many years have ripened perfectly in the open air, without laying down or covering of vines in winter.

The crop in the past has been almost wholly exempt from frost, the contiguity of the lake influencing the temperature; even the well-known frost of June, 1859, which devastated so large a portion of the whole country, not injuring the vineyards near the lake.

### THE CULTURE.

The grape was introduced at this point about forty years ago, by Rev. WILLIAM W. BOSTWICK, and both varieties, Isabella and Catawba, successfully cultivated by him in the open air.

WILLIAM HASTINGS also for many years continued the culture on the property, a portion of which is now in the hands of this Company. During all this time the crop has never failed, and thus far has been exempt from mildew or insects.

There are already several hundred acres of bearing vineyards in this district, and the crop has become a valuable and prominent part of the production of this region.

*It is proposed by the Company to set from twenty-five to fifty acres of vineyard per annum, until the property is fully developed.*

### WINE AND WINE MAKING.

It is proposed to erect large and commodious cellars on the property the ensuing season, in time for the vintage of next fall.

The success which has attended the manufacture of wine in the United States, is a sufficient recommendation without detail.

Wine manufactured for some years past from grapes grown here has been highly commended, and has already acquired a reputation inferior to none in this country.

The protection furnished by Government to our own manufacture, and the universal public demand for a pure article, both of wine and brandy, give the Company every reason to believe that it will be successful.

### ESTIMATES.

An acre of grapes in a good year will produce three and one half to four tons fruit, but a fair average yield is about two and one-half tons.

The price the past year has ranged from 15 to 25 cents per pound in New York, in the general market.

At 10 cents per pound (which they are worth to the Company for wine purposes) the production of one acre would be say \$500. The Company can develop at least two hundred acres of bearing vineyards on their property, the products of *one half of which* in a single year at that price would be \$50,000, exclusive of the manufacture of wine.

The gentlemen who have consented to take the management of this enterprise are most of them experienced in grape culture. Some of them are pioneers in this location. They are well known, and their names are a sufficient guarantee that the business will be vigorously prosecuted, as well as economically and honorably managed.

No pains will be spared to secure the most intelligent and competent men to carry on the business of the Company, and the manufacture of the best native wines and brandy, after the most approved American and European methods.

About \$150,000 of the Capital Stock has been already subscribed. Books of subscription for the residue of the Capital Stock are now open at the First National Bank of Bath, New York, at par.

The Company will allow subscribers to the remainder of stock, at their option, the privilege of loaning from the Company three-fourths or less of the amount subscribed and paid in, on the security of the notes of subscribers on time, with interest at seven per cent, payable semi-annually, secured by assignment of stock as collateral. Notes if taken, payable in installments of one and two years.



## CHOICE SEED.

WITH the return of another season, I would invite the attention of the public to my ANNUAL CATALOGUE OF GARDEN SEEDS, including over two hundred varieties, many of which are of my own raising. I would call particular attention to the following list of new, rare, or very desirable vegetables:

Cannon Ball Cabbage (new, early, and the hardest of all cabbage; the heads round and about as hard as a cannon ball!) Marblehead Mammoth Drumhead Cabbage (the largest cabbage in the world!) Stone Mason Cabbage (the best of all winter cabbage; the heads hard and very reliable;) Leorwand's Mammoth Cauliflower (the largest of all;) Mammoth French Squash (weighs from 100 to 260 lbs.) Mammoth Sweet Corn (the largest sort known; selected from ears weighing from two to three pounds; very sweet; excellent for the table;) Yokohama Squash (new, from Japan;) American Turban Squash, (new, the driest, sweetest, and best of all fall squashes—first-rate;) Striped Guadalupe Egg Plant (quite ornamental;) New York extra large purple Egg Plant (the largest of all varieties.)

Ornamental Kale (several varieties in one package, fine for either the flower or kitchen garden;) Pierce's American Cauliflower (the standard late sort in Boston market;) Early Paris Cauliflower (imported seed—the best early sort;) Early White Japan Melon (new, very sweet, fine;) Ward's Nectar Melon (the sweetest, spiciest, best of all the green-fleshed varieties;) Caterpillar Plant (a curious vegetable; several varieties in one package;) Vegetable Snails (another natural curiosity.) Each of the above at 25 cents a package.

Forty Days Corn (extra early—about ten days earlier than Darling's Early;) Mexican Sweet Corn (the sweetest of all varieties of table corn;) Golden Sweet Corn (an early, prolific, sweet table corn, of a bright golden color, fine;) Hubbard Squash Seed (true; I introduced this;) Cow or Tree Cabbage (for stock;) Yard-Long Beans; Extra Early York Tomato (very early, very prolific, of good size and excellent quality;) Cook's Favorite (very early apple tomato; prolific; of excellent quality;) Yellow Lupins (the plant so highly recommended for subsoiling in a recent Patent Office Report; highly ornamental;) Tom Thumb Pea (very early; grows 10 inches high; very productive;) Drew's New Dwarf Pea (new, early, very dwarf, very prolific, excellent pea, egg-shaped; each plant forms a bush; but one pea being required to about one foot of row;) Brown's New Dwarf Early Marrowfat Pea (a new variety which may be relied on as both the earliest and most dwarf Marrowfat grown; very prolific;) Improved Long Green Cucumber; six finest sorts of Cabbage Lettuce in one package; True Boston Curled Lettuce (the most elegant of all lettuces; quality good;) Ornamental Gourds (many varieties in one package;) Spotted Lima Bean; Concord Bean (a new pole bean, remarkably early; quality first-rate;) Extra Flat Beet, (new, very early, about as flat as a turnip; quality excellent;) Chick Peas (two sorts mixed; extensively used in Europe as a substitute for coffee;) Chinese Sugar Cane (pure; seed imported;) New Jersey Hybrid Cucumber (one of the largest and best varieties cultivated;) Lester's Perfected Tomato (very large and thick-meated;) Sutton's Student's Parsnep (new; recently originated in England; desirable;) Chinese Rose Winter Radish (decidedly the best of all the winter sorts; an acquisition;) Hood's Dwarf Imperial Purple Celery (new; superior;) Indian Chief Bean (a pole bean; can be used as a string bean much later than any other variety; very productive.)

Seed of the above at 15 cents per package.

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JAMES J. H. GREGORY, Marblehead, Mass.

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JAMES J. H. GREGORY, Marblehead, Mass.

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I hereby certify, that I have been familiar with all the processes employed by the South Down Company in the manufacture of their "Sheep Wash Tobacco," and that the article prepared under Mr. Jaques' Patent contains all the useful principles of the Tobacco in a concentrated form.

This Paste, employed as a Sheep Wash, according to the directions furnished by the Company, has the effect of curing Scab and other cutaneous diseases, and destroying all parasitic insects which infest the skin and wool of the Sheep, and thereby improves the health of the animal, as well as the quality of its fleece. Employed in the same way, the solution being made stronger, it will destroy those insects which infest the skins of larger animals, and also those that are injurious to vegetation.

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In order to give greater facility in the application of the **Raw Bone Phosphate**, we have, since the last season, succeeded in making it so fine and uniform as to be capable of drilling. Farmers will find this an important advantage.

The facilities for the manufacture of the **Raw Bone Phosphate** are now very complete, and we can fill large orders with promptness; but it is desirable that all orders should be sent in as early in the season as possible.

It is packed in bags and barrels, and may be had of any regular dealer in Fertilizers, (to whom we advise all farmers to apply,) or of the sole manufacturers,

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### RAW BONE PHOSPHATE

last fall exceeded by many hundreds of tons that of any previous season, which is a substantial proof of its excellence and popularity. We are now in the midst of a very active spring season, and the demand is very pressing from all quarters. Farmers would do well not to delay their orders.

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The following letter from one of the most successful agriculturists of New Jersey will speak for itself:

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"MESSRS. BAUGH & SONS: Two years ago I wrote a short letter in our County Agricultural paper, giving my experience of two years with your Raw Bone Phosphate, and advising our farmers to give it a trial. Since that time I have given it a more extended application to crops, and the results have more than fulfilled my expectations.

"My farm is a light sandy loam. In its natural state it would not grow anything. Peruvian Guano will stimulate it to bear a good crop, but the second year it will require double the amount of Guano to produce the first year result. Barn-yard manure, glue waste, soap boilers' waste, are nearly exhausted in maturing one crop; but the Raw Bone Phosphate will mature two good crops, and the land will be made more valuable with each year's application.

"By using four hundred pounds of your Phosphate to the acre—one-half broadcast and the other applied in the hill, I have gathered one hundred bushels of ears of fine corn. I have nearly twenty acres of fruits of different kinds, and I now rely wholly upon your Phosphate to keep them in good health. I have two thousand pear trees, two acres of strawberries, two acres of blackberries, and six acres of grape-vines, and they are all in superb condition. If any farmer has better trees and vines than I have, he must have used your Raw Bone Phosphate.

"Applied to root crops the results are equally satisfactory. For turnips, cabbage, mangolds, tomatoes, it is every way more valuable than any other manure I have ever used; combined with marl it is a most superior manure for potatoes.

"I have tried several other Phosphates, among them some of the most popular in the country, but with very different results.

"Market gardeners and fruit-growers should certainly use Baugh's Raw Bone Phosphate. They would soon perceive a marked difference in the QUALITY of their vegetables and fruits over those stimulated with cheap composts of night soil.

"Yours truly,

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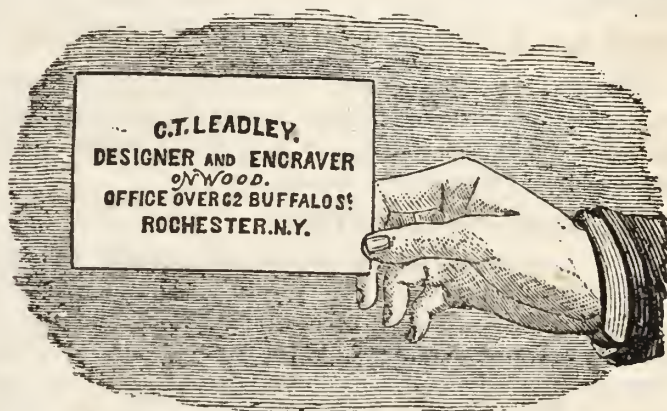
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I exhibited in June last at the office of the *Agriculturist*, 41 Park Row, New-York, at the great Strawberry Show, a plant less than ten months old, with two hundred and ninety-four perfect berries on it; this is about twice as many as has yet been produced from the Wilson, Russell, or any other variety, from a plant of the same age. The plant exhibited was no more remarkable in productiveness than a hundred others in my garden, which were examined by Charles Downing, W. F. Heins, Prof. Thurbur, and P. B. Mead. The berry is a bright, glossy crimson, the size is enormous, the average berries exceeding anything ever before seen in the Strawberry line. Three berries exhibited at the Great Show in New York weighed 4 oz.—twelve ounces to the lb.

The *Agriculturist* of August, 1863, says:

"The plant itself bears large leaves, is very vigorous and shows a good bearing propensity. Taken all in all, this new seedling is probably the largest and most remarkable production in the strawberry way that has ever appeared."

From the same paper, July, 1864:

"Mr. Carpenter set out his plant in soil not enriched beyond what ordinary good culture requires, and last autumn it made a good share of new plants, the majority of which were, this spring, transplanted to a separate bed. A few days ago we visited Mr. Carpenter's place to see the condition of his plants, and though prepared for a fine show, the anticipation was far short of the reality. The small plants set out this spring showed a crop of fruit large enough to satisfy any one, while it is difficult to describe the appearance of those which had not been removed, in terms which shall not seem extravagant. These plants, not a year old, formed stools measuring at least eighteen inches across the leaves, and the very pictures of robust health and vigor, without a scorched or imperfect leaf upon them, and filled with rapidly swelling fruit. The stools on all sides and in the center were crowded with fruit stalks, each of them loaded, without an imperfect berry or a blast to be seen. Mr. Peter B. Mead counted the fruit on three contiguous plants, and found the astonishing number of 234, 243 and 294 berries to the plant. Such experienced fruit-growers as Charles Downing, Peter B. Mead and W. F. Heins, have visited these plants, and all agree in considering them as something unparalleled in the history of strawberry culture."

The plant from which my stock has been produced, exhibited remarkable bearing properties; nearly all the young plants bore fruit from June to October, the first season. Last season the young plants were constantly fruiting every month until frost.

I have a large stock of prime plants at the following rates:

2 plants.....	\$ 1 20
6 plants.....	8 00
12 plants.....	5 00
100 plants.....	25 00
1000 plants.....	200 00

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Your ideas on wintering bees are very valuable, and must be of great use to us on the prairies.—M. L. DUNLAP, *Editor Illinois Farmer*.

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At the Genesee Seed Store, Rochester, N. Y.

I HAVE now on hand for the spring trade one of the best assortments of Seeds ever offered in this market, comprising all the Vegetable Seeds usually sold in this country. Prices to suit the times.

500 lbs. Large Red Onion, early and late.  
200 lbs. Yellow Dutch Onion.  
50 lbs. Yellow Strasburg Onion.  
200 bush. Black-eye Marrow.  
100 bush. Irish Marrow.  
150 bush. Early Washington.  
50 bush. Prize Taker.  
25 bush. Champion of England Peas.

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J. RAPALDE



# THE GENESEE FARMER

THE PRACTICAL AND SCIENTIFIC FARMERS OWN PAPER.

VOL. XXVI. SECOND SERIES.

ROCHESTER, N. Y., MAY, 1865.

No. 5.

## WALKS AND TALKS ON THE FARM.—NO. 17.

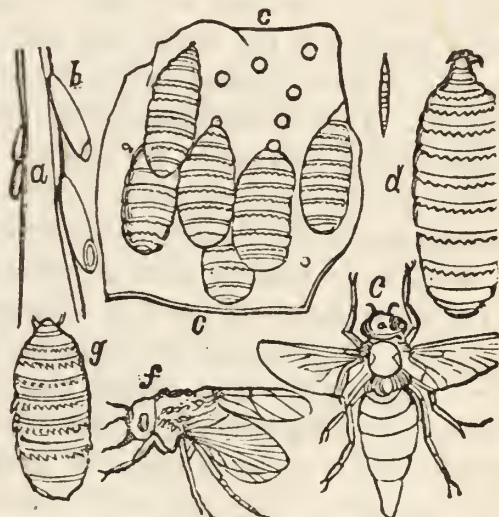
I HAVE just lost a good horse. He had been troubled occasionally for the last year with what I thought was indigestion and cholic, but what my men thought was the bots. Till last spring he was a remarkably healthy horse, when I gave the team to a young scape-grace who, though taking considerable pride in the appearance of the horses, was inclined to drive them too hard when on the road, and then let them stand till they got chilled and afterward feed them too much grain. Under such treatment, I was not surprised one day to be informed that "Charley was sick." He suffered considerable pain, and manifested all the symptoms of ordinary cholic. A warm stimulating drink soon relieved him, but from that hour it was settled that he had the Bots. Whether anything was given him without my knowledge to kill the bots, I do not know. He was several times affected with pain, but soon got over it. The other morning, however, he had a much worse attack than ever before. He trembled all over, and the sweat ran off him in great drops. I did all that I could to relieve him, but in about three hours he died, dropping off quite suddenly. On examination, I found that *his stomach was entirely rotted away*. Of course every one says it was the bots that had eaten it, and there are those who think it served me right because I did not give the horse some of their nostrums for killing the bots.

But I do not think the horse died from the bots. It is much more likely that he had inflammation of the stomach, caused in the first place by bad treatment, and heightened, perhaps, by something given him to destroy the bots. The stomach in a horse is of less importance than in any other animal. It may be diseased without seriously affecting the health of the horse. Mayhew mentions a case where a horse lived for several days after his stomach had been eaten away by poison, accidentally administered to him.

At all events, all the authorities agree in saying that the bots cannot be killed by anything that

would not kill the horse. Most of them think, too, that the bots are not injurious. Mr. Clark, to whom we are indebted for all that is known about the habits of the bots, thinks they are beneficial rather than otherwise. I will read you what Youatt says about them:

"In the spring and early part of the summer, horses are much troubled by a grub or caterpillar, which crawls out of the anus, fastens itself under the tail, and seems to cause a great deal of itching or uneasiness. Grooms are sometimes alarmed at the appearance of these insects. Their history is curious, and will dispel every fear in regard to them. We are indebted to Mr. Bracy Clark for almost all we know of the bot.



*a* and *b*, The eggs of the gad-fly adhering to the hair of the horse.

*c*, The appearance of the bots on the stomach, firmly adhering by their hooked mouths. The marks or depressions are seen which are left on the coat of the stomach when the bots are detached from their hold.

*d*, The bot detached.

*e*, The female of the gad-fly, of the horse, prepared to deposit her eggs.

*f*, The gad-fly by which the red bots are produced.

*g*, The smaller, or red bot.

"A species of gad-fly, *e*, the *cetrus equi*, is in the latter part of summer exceedingly busy about the horse. It is observed to be darting with great rapidity toward the knees and sides of the animal. The females are depositing their eggs on the hair, and which adheres to it by means of a glutinous fluid with which they are surrounded (*a* and *b*.) In a few days the eggs are ready to be hatched, and the



slightest application of warmth and moisture will liberate the little animals which they contain. The horse in licking himself touches the egg; it bursts, and a small worm escapes, which adheres to the tongue and is conveyed with the food into the stomach. There it clings to the cuticular portion of the stomach, *c*, by means of a hook on either side of its mouth; and its hold is so firm and so obstinate, that it must be broken before it can be detached. It remains there, feeding on the mucus of the stomach during the whole of the winter, and until the end of the ensuing spring; when, having attained a considerable size, *d*, and being destined to undergo a certain transformation, it disengages itself from the cuticular coat, is carried into the villous portion of the stomach with the food, passes out of it with the chyme, and is evacuated with the dung.

"The *larva* or maggot seeks shelter in the ground, and buries itself there; it contracts in size, and becomes a chrysalis or grub, in which state it lies inactive for a few weeks, and then, bursting from its confinement, assumes the form of a fly. The female, becoming impregnated, quickly deposits her eggs on those parts of the horse which he is most accustomed to lick, and thus the species is perpetuated.

"There are several plain conclusions to be drawn from this history. The bots can not, while they inhabit the stomach of the horse, give the animal any pain, for they have fastened on the cuticular and insensible coat. They cannot stimulate the stomach, and increase its digestive power, for they are not on the digestive portion of the stomach. They cannot, by their roughness, assist the trituration or rubbing down of the food, for no such office is performed in that part of the stomach—the food is softened, not rubbed down. They cannot be injurious to the horse, for he enjoys the most perfect health when the cuticular part of his stomach is filled with them, and their presence is not even suspected until they appear at the anus. They cannot be removed by medicine, because they are not in that part of the stomach to which medicine is usually conveyed; and if they were, their mouths are too deeply buried in the mucus for any medicine, that can be safely administered, to affect them; and, last of all, in due course of time they detach themselves, and come away. Therefore, the wise man will leave them to themselves, or content himself with picking them off when they collect under the tail and annoy the animal.

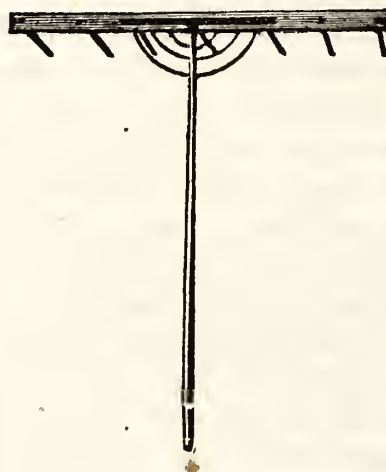
"The smaller bot, *f* and *g*, is not so frequently found.

"Of inflammation of the stomach of the horse, except from poisonous herbs, or drugs, we know little. It rarely occurs. It can with difficulty be distinguished from inflammation of the bowels, and in

either case the assistance of the veterinary surgeon is required."

If it is true that bots do not cause pain in the stomach, the fact ought to be generally known, for this popular notion which attributes every intestinal derangement to bots, and leads to the administration of drugs to destroy them, has doubtless caused the death of many a valuable horse. One thing seems clear enough,—no medicine can kill the bots as long as they are attached to the stomach. Cole says: "They have lived in rum twenty-four hours, a decoction of tobacco eleven hours, spirits of turpentine forty-five minutes, and in brine ten hours, without any effect."

A day or two ago I made a simple implement for marking out the drills for onions, carrots, parsneps, and other similar crops. I took an ordinary wooden



hand-rake and knocked out the teeth, and with three or four large screws that would just fit the teeth holes, fastened a piece of scantling seven feet four inches long to the bottom side of the rake-head. Into this scantling I bored seven holes for wooden pegs, fourteen inches apart.

The pegs are about five inches long and about an inch wide in front. The "machine" works to a charm. By stretching a line for the first row, and then afterwards running the end tooth in the last row, the whole piece can be marked out with great rapidity, and if the ground is smooth, the rows can be made perfectly straight.

I have just been setting out some strawberry plants, and thought I would try the plan recommended by J. J. Thomas at one of the meetings of the Western New York Fruit Growers' Society. Ordinarily the plants are set in holes, with the roots altogether in a mass. Mr. Thomas said he had tried whether it would not be better to spread out the roots on a cone, like the ribs of an umbrella, and he found that there was a great difference in favor of plants so transplanted. If the ground is mellow and well pulverized, the plants can be set out in this way almost as quickly as in the old way. I first made the holes with a dibble, in the ordinary way, and threw a tablespoonful of superphosphate in the hole. Then mix this superphosphate with the soil with the hand, and by pressing the fingers into the soil, a little cone of earth can be made in a moment, and the roots can be spread out on all sides of it in



half the time it takes to describe the process. If any one will try the plan, it looks so reasonable that the plants will do much better, that the little extra labor will deter no real horticulturist from adopting it.

John Johnston informs me that the drover who bought his sheep, wrote him that "they sold big, 14½ cents per lb. live weight." Mr. J. adds: "I believe few of the *mutton sheep* sold at a higher figure. If these sheep had been fed as Mr. Lawes' yearlings, from lambs until I got them, they would have weighed 200 lbs. each on an average, besides shearing 8 or 9 lbs. of fine clean wool yearly. They were not the Merinos that are constantly sweating something like gas tar. I cannot fatten that kind."

Good, and doubtless true. And why have we been breeding such greasy sheep? The manufacturers, or rather the wool buyers, did not sufficiently discriminate between good and poor wool—between that which was clean and fine and that which was greasy and of coarser fibre. The grease, or, as Mr. Johnston calls it, the "gas tar," is of no value either to the farmer or the manufacturer, and it doubtless costs as much food to produce a pound of this worthless stuff as it does to produce two pounds of good mutton. But as the wool buyers paid as much for it as for a pound of wool, the greasier you could make the fleece the more profitable, just as a grocer who puts the most sand in his sugar makes the largest profits, as long as his customers, like the wool dealers, "do not discriminate." The grocer, however, is wiser than the sheep breeder. The sand costs him nothing, while the "gas tar," though equally valueless to the consumer, is produced at considerable expense. I heard a Vermont wool grower say the other day, that he could grease his boots with a lock of wool pulled from the back of one of his favorite sheep. Now I really do not see why it would not be better to smear the fleeces with some cheap grease, rather than to produce it in the wool. It would certainly be more economical.

I bought six bushels of clover seed to-day and had to pay \$17 per bushel for it. But clover, on a grain farm, is indispensable. It is the only really renovating crop we have. John Johnston, now that he has made his land so rich, may think clover does not pay, but on most farms we must grow clover or we shall grow little else. In fact, one of the means Mr. Johnston used to bring up his land was by raising large crops of clover and making it into hay to be fed to sheep in winter. The manure from clover is much more valuable than from timothy. Clover may not pay, directly, as well as timothy, but when we take into consideration the fact that it impoverishes the soil less than timothy, while it makes

better manure, and is, theoretically at least, weight for weight, quite as nutritious, clover must be the main reliance of wheat growers for keeping up the fertility of the land. I have always recommended the farmers in Western New York to "grow their own clover seed, and sow it with an unsparing hand." I will for the future endeavor to conform my practice to my preaching. I think it will be some years before I again pay out \$102 for six bushels of clover seed.

It is an excellent plan to have a piece of young clover near the barn-yard, and give it a heavy dressing of well-rotted manure in the fall. This will start it very early in the spring, and give a great crop. It is just the thing to cut green to feed horses at noon in the stable. And if the second crop is allowed to go to seed, a large yield may be expected, even in such a dry season as the last.

A prominent public man at Washington writes me: "I envy you the delights of your farm, and long to get back to mine." There is a pleasure in farming which those who have never engaged in other pursuits do not appreciate. I pity the man who has no love for agriculture or horticulture. There must be something radically wrong in his constitution. Depend upon it, he cannot be much of a man. Of course he may wish to engage in other pursuits for the purpose of making money. But if he prefers to stand behind a counter and measure out dry goods or groceries, and thinks it more "respectable" than cultivating the soil, he either lacks the instincts of a gentleman, or is weak in the upper regions. I would not walk ten rods with such a man if I could help it, or have any intercourse with him further than was necessary. I should expect him to say something that was disagreeable.

"But farmers are not all gentlemen." True. Some of the most conceited and disagreeable men I ever knew were farmers. But such men, however much they may affect to despise those engaged in other pursuits, have no real love for agriculture, and no genuine self-respect. Ignorant, prejudiced, without culture, ill-bred, self-satisfied, with low tastes and sordid desires, they are incapable of appreciating the dignity of their avocation.

Mr. Johnston writes me that the \$756.80 which I gave as his profit of feeding 280 sheep the winter before last, was not all profit. The hay consumed in six weeks and \$100 worth of corn should be deducted. The error is of no particular consequence, as the principal object of mentioning the fact was to show how unusually profitable it had been to fatten sheep the past winter. As I understand Mr. J., he has never before made so much money in fattening sheep.



I think sheep that are not fit for the butcher will be bought cheap after shearing. There are so many sheep in the country, with a prospect of low rates for wool, that the price of sheep is almost certain to decline. Beef is still very high and likely to continue so for some time, and this will have a tendency to keep up the price of sheep, more especially of those in good condition.

The war has demonstrated the advantages of good farming. Those farmers who had their land in good condition, and who were thus enabled to get good crops, have made money, while the poor farmer, who at the best receives little more than a bare return for his labor, has derived no benefit from high prices. His extra expenses have increased in greater ratio than his extra receipts. If the experience of the last two years does not convince farmers of the advantages of a higher system of agriculture, nothing will.

#### PERMANENCY OF SUPERPHOSPHATE.

IN the March number of the *Farmer* we made some remarks in regard to the permanence of manures, based on the statement of the *Canada Farmer*, that "if really good," superphosphate was a permanent manure. We endeavored to show that a good superphosphate was not a permanent manure, and that the poorer the article, the longer it would last. If there was no superphosphate in it—if it was nothing but indecomposed bone-dust or animal charcoal—it would be just as permanent as bone-dust. But make the bones soluble by decomposing them with sulphuric acid—in other words, convert them into superphosphate—and they will act quicker and consequently be less permanent.

To quote a familiar saying, "You cannot eat your cake and keep it." If you make the bones soluble, they will be readily taken up by the roots of plants and increase their growth, but after this has occurred, how much is there left for future crops? You have eaten the cake. If you apply more superphosphate than the plants need, the soluble phosphate may be reconverted back again into the comparatively insoluble state, and some effect may be produced on future crops, but this is very poor economy.

The *Canada Farmer* says: "Our contemporary lays it down as a principle of universal application to manures, that the better they are, the less permanent will be their results. We confess our inability to see this. A manure that will both act quickly and enduringly, must be better than one of which you 'get the whole effect the first year.'"

This is undoubtedly true, but it is begging the question. It is assuming that you can "eat your cake and keep it"—that a pound of ammonia, a pound of phosphoric acid, or a pound of potash, or

the three combined, can be applied to the soil in a soluble state, be taken up by the plants, in other words, "act quickly," and still remain available for the use of future crops. If a manure "acts quickly," it does so at the expense of its permanency, and if it is permanent, it is so at the expense of its immediate availability.

Another point discussed was in reference to whether superphosphate would injure the roots of plants. The *Canada Farmer* said it would. We stated that in our experience it never had done so, though applied immediately in contact with the finest seeds. The editor replies that "Coe's superphosphate of lime will injure the roots." This is probably the case. But we were talking about superphosphate of lime itself, and not Coe's superphosphate. An ordinary superphosphate of lime, made by dissolving bone dust in sulphuric acid, will not hurt the roots of plants. Salts of ammonia will do so. Now if you mix the latter with the former, and call the compound "superphosphate," such superphosphate may hurt the seed and roots of plants.

The addition of salts of ammonia, or of animal matter capable of forming ammonia, greatly increases the value of superphosphate, and this we believe is done in the case of Mr. Coe's manure. It certainly contains ammoniacal salts, which is not the case with simple superphosphate of lime. The latter, as we stated, will not injure the seed, as thousands of tons are annually drilled in with turnip seed in England, not only without injury, but with the greatest benefit. We think Coe's superphosphate is an excellent article, much better than a simple superphosphate which contains no ammonia, and it would be well to indicate in its name that it contains ammoniacal salts, and then all intelligent farmers would know that it should not come in immediate contact with the seed or with tender roots.

CLOVER HAY FOR SHEEP.—Our esteemed correspondent Mr. Fassett, says when he has well-cured clover hay, cut in blossom, he never feeds his sheep grain, unless it be to the ewes about lambing time, and they come out in the spring healthy and in excellent condition. With clover, if any grain is needed, feed oats; with timothy, corn is better. If he commences to feed grain late in the winter, he expects to lose much of the wool, but, as he observes, that is better than to lose the sheep. With plenty of well cured clover hay, cut in blossom, sheep need no turnips or potatoes to keep them in good condition.

ONE of the correspondents of the *Genesee Farmer*, who is quite successful with his sheep, says he always keeps a bucket of tar, and whenever he hears a cough he smears the nose of the sheep with it.



## THE PROFITS OF WOOL GROWING.

THE Report of the Agricultural Department publishes a letter from Mr. C. S. Potter, of Kalamazoo, Mich., giving his experience with a flock of sheep. We make a few extracts. Mr. P. says:

The spring of 1861 found me tired of commercial life, sickened with politics, advanced in years, and quite infirm from sedentary habits; with no practical experience in farming, the use of agricultural implements or the habits of stock. I traversed portions of Ohio, Illinois, Wisconsin, and Iowa, looking for a farm to retire upon. In October I purchased in this State, and on the first day of November, like the man who purchased an elephant, I found myself the owner of four hundred and eighty acres of land, and "didn't know what to do with it"—a fit subject for knowing ones to impose upon.

I have since learned that the flock I bought with the farm, consisting of wethers, ewes and lambs, were common sheep. The lambs graded up by a grade Spanish buck, shearing ten pounds of washed wool. This was a flock of two hundred and seventy-six, and cost \$2.50 each, or \$690. Another flock of eighty, having two French bucks, a few nearly pure French ewes, a few Leicesters, and about equally divided between ewes, lambs and wethers, I purchased for \$150. To this I added two as good Spanish blooded bucks as could be obtained, for \$30, making 358 sheep, costing me \$870.

These were considered high figures at that time, and the source of some merriment to the yeomanry in the vicinity. As if to add to my confusion, about the middle of December my shepherd came to me and said "the largest flock had the *scab*, and that the vender knew the other flock had the *foot rot* when he sold them to me, and that I should slaughter the flock and keep no sheep for years to come." Here was a dilemma, and, in the opinion of some, the "book farmer" would trot back to town again wiser than he came. Goaded to desperation by such remarks, and the idea of being so "wooled," I "off coat" for a personal examination. Some of the largest flock had spots on their haunches and shoulders of harsh, dry, and matted wool; the skin under these spots exhibited small pustules, and the whole skin yellow in appearance. This seemed the *scab* indeed, and I treated it as such by withdrawing the diseased ones, and housing them in warm stables and pouring on to the spots from a tea-kettle a strong solution of tobacco as often as it became dry, and until the old wool on the spots sloughed off, a new and healthy growth starting. This occurred within three weeks. No new cases appeared, and I have since determined their disease to be "pelt rot," contracted from running through the wet autumn of 1861, in high clover. The second flock undoubtedly

had a slight touch of the foot rot, contracted from the low lands they had run on the season before. The hoofs of this flock I immersed twice a week in pyroligneous acid,\* diluted one-half, and, suffice it to say, the first day of the next February no lamb sheep or skin disease could be found in the flock. By this time, becoming somewhat interested in the welfare of my sheep, and inured to exercise, as the 15th of April approached, I took personal charge during the lambing season, rearing about 70 per cent. of those dropped; thus ended all my fears. I could tell "a sheep from a goat," and went on my way "thanking God and taking courage."

Now for the general success and three years' experience. The whole flock was debited with their purchase-money. At the end of the year interest thereon was charged at 10 per cent., charging them the first year \$1.50 per head for board and shearing. The second year, the account running two years before balancing, the flock was debited with one year's interest on the previous year's board. As I sold culls, wethers and lambs, and wool, the flocks received credit, as the following exhibit will more particularly unfold:

1861.			
November 1.	To purchase money for 358 sheep.....	\$870.00	
1862.			
November 1.	To purchase money of 1 buck.....	20.00	
	To board and shearing 350 sheep 1 year, at \$1.50 each.....	525.00	
	To 10 per cent. interest on \$870 purchase money, 1 year.....	87.00	
1863.			
March.	To purchase money for buck-lamb.....	10.00	
November.	To board and shearing 423 sheep, at \$1.50 each.....	634.00	
	To 10 per cent. interest on \$1,425, original cost of flock, and 1 year's board.....	142.50	
	Total cost.....	\$2,288.50	
	Credit.		
1861.			
December.	By 8 sheep slaughtered, at \$2.50 each.....	\$20.00	
	By receipts for lost sheep's pelts.....	12.00	
1862.			
July.	By receipts for 1,526 lbs. of wool, at 50 cts.....	763.00	
August.	By receipts for 2 bucks sold.....	20.00	
October.	By receipts for 50 wethers sold, at \$2.50.....	125.00	
November.	By average interest on receipts..	23.50	
1863.			
September.	By 20 cull ewes and 50 wethers, at \$3.....	210.00	
	By 51 wether lambs and 25 cull ewes at \$2.50.....	190.00	
October.	By 25 cull ewes, at \$3; 50 do. at \$3.50.....	250.00	
	By 25 wethers, at \$3.....	75.00	
	By 22 wether lambs, at \$2.50; 1 buck at \$3.....	58.00	
	By 7 lambs' pelts.....	4.00	
	By 1 sheep slaughtered.....	8.25	
November.	By 1,726 lbs of wool, at 75 cts....	1,294.50	
	By on hand 240 breeding ewes, 69 one shear ewes and 19 one shear wethers, total 323, at \$2.50.....	820.00	
	6 bucks, valued at.....	115.00	
		\$3,983.25	
	Deduct expenses as above.....	2,288.50	
	Net profit.....	\$1,694.75	

It will be observed in the foregoing statement of two years, that the sheep on hand were estimated at

\* Pyroligneous acid is nothing more nor less than vinegar.—*Eds. G. F.*



\$2.50 per head, exclusive of bucks. In opening the account for 1863 and 1864, I value the ewes, lambs and wethers at \$4 each, which, if added to the profits, as shown in the balance of 1861, 1862, and 1863, exhibits a net profit of \$2,186.75 on an outlay of \$870 the two years before. The third year's exhibit is as follows:

1863.		
November 1.	To valuation of 328 sheep, at \$4.....	\$1,312.00
	To valuation of 8 bucks .....	115.00
	To cash paid for buck John .....	25.00
1864.		
June.	To cash paid for washing and shearing....	50.00
November 1.	To 10 per cent. interest on \$1,427 valuation November, 1863.....	142.70
	To boarding 337 sheep one year, \$2 each..	672.00
Total cost .....		\$2,316.70

*Contra Credit.*

1864.		
July.	By 1,478 lbs. of wool, at \$1 .....	\$1,478.00
August.	By 7 wether lambs to butcher ...	21.00
August 11.	By 19 yearling wethers, at \$4....	76.00
September 6.	By 70 wether lambs, at \$3.50....	245.00
	By 12 cull ewe lambs, at \$4.....	48.00
Sept. 10.	By 41 cull ewes at \$5.....	205.00
October.	By cash for buck lamb .....	15.00
	By cash for Dan buck.....	15.00
November 1.	On hand 69 one-shear ewes, 60 ewes of the original flock, 122 ewes twice shorn, 85 ewe lambs, and 3 wethers ditto, 5 buck lambs—in all 344, at \$4 each... 1,376.00	
	7 bucks.....	115.00
		\$3,594.00

Net profit .....\$1,277.30

I am now in my fourth year in sheep husbandry, and having disposed of all my wethers but three, and all of the ewes which had lambs and which did not shear four and a half pounds, at \$5 per head, I have valued the whole flock at what the drafted ewes sold for, viz., five dollars each. This increase of one dollar each, added to the profit of last year, makes the net gain of \$1,621.30 on an investment one year ago of \$1,427. My present flock, it will be seen, consists of 60 ewes of the original flock, 122 two-shear ewes, and 69 one-shear do., all with lamb, or supposed to be; 3 lamb wethers, 85 ewe lambs, 5 buck lambs, and five old bucks. The latter I have estimated at \$115, as the year previous, and all of the former at five dollars each, believing them, aside from the change of times, to have doubled in value by careful breeding. So that the account stands on the first day of November, 1864—

*Dr.*

To 5 bucks .....	\$115.00
To 344 sheep, at \$5 each.....	1,720.00
\$1,835.00	

The first year I fed with clover hay and about one gill of shelled corn to each sheep, commencing to feed corn to the ewes two weeks before copulation with the bucks, and continuing it until turned out in the spring. It will be seen that the flock of ewes and wethers sheared a little over four and a half pounds general average that year. The next year I fed no corn after January, and the general average of the same flock was but a trifle over four pounds. The last year I fed corn to the breeding ewes as

heretofore before copulation, and until the 1st of February, when I commenced with wheat bran, known as coarse middlings, and weighing about forty pounds to the bushel, intending to feed about three-quarters of a pound to each until turn-out. The flock of ewes thus grained and fed with poor clover hay twice a day, salted once a week, including 19 inferior wethers, once shorn, and since sold for four dollars each, it will be seen by inspection gave a general average of over four and a half pounds of clean washed wool, which sold readily in the barn for one dollar per pound.

Last season I reared over 90 per cent. of lambs, and expect to do so this spring. Dropping should commence by the 5th of April, and should be all through with before the ewes are turned out. Lambs do not do well coming after so great a change in diet; and if an ewe loses her lamb, her udder is generally ruined for want of care. One-shear sheep require better feed than older ones; quite as good as lambs if allowed to breed. I am feeding that kind of ewes, hay twice a day, and one pound of wheat middlings each. The older ewes have straw, bean haulm, or corn-stalks twice, and hay once, with three-quarters of a pound of the middlings per day. The lambs have hay three times a day, with a peck of shelled-corn mixed with treble the quantity of middlings. I have not lost a sheep since last April, at the lambing season, nor do I expect to until that season shall arrive again.

**THE FARMER'S FIRESIDE.**

WE believe the fireside of the farmer, with his family about him, is the proper place for contemplating the elements and productions of the farm. Here, with the aid of experience and agricultural journals, the members of the family may literally every winter evening make an agricultural club; here they may amuse and enlighten each other on every matter relating to the staple interests to which they are allied, and on which they subsist. Here, too, they may make themselves familiar, not only with the literature of rural economy, but all current literature—with history, with biography, with poetry, with music—and with whatever else may come within the range of their taste and fancy.

It is known and considered that farmers have or should have wives, like other men; that they may have sons rising to manhood, and daughters just budding and swelling into womanhood. Neither of them is supposed to be made up of cold abstractions, but all have social affinities, requiring a mental element corresponding to the development and nourishment of these affinities. Far be it from us to stifle or starve these affinities. They should live under a genial sun, be fed with refreshing showers,



and then receive the care of a wise, social culturist. A farm and a farm-house without matrimonial influences would be cheerless, like an Arabian desert. Without the mental and physical tendencies that lead to wedlock, youth would be less interesting than they now are. Accordingly, in preparing this article for the farmer's fireside, for the young as well as the old—for one sex as well as for the other—for each supposable juncture in the family organization, we have collected some gems of the upheavings of the young bosom, as well as of the soil; of the flowers that spring up in the heart, as well as those that cluster in the garden and about the doorside. If these social gems are permitted to shoot up in their native glades, they will resemble the daisy and the rose, that develop not half their inherent elements of beauty and fragrance, till transplanted to the flower garden; and, that till receiving the skillful supervision of the gardener, were small austere plants, instead of being the beautiful plants they now are.

It is verily a paradox, that agriculture should ever be held in low estimation; such, nevertheless, is the fact. It is no uncommon thing, that we hear that even those who are engaged in it, and are dependent on it for a living, express a great abhorrence of it. Did we not witness the ridiculous absurdity of such conduct, we could not believe it true; for it is in opposition to the clearest evidence on which any hypothesis can be predicated. Who may not see with his own eyes, that on the products of agriculture the entire life of the animal world—of man and beast—is sustained; and that these products are the very elements of nearly every kind of business in the whole range of society? Were it not for them, the animal kingdom would be blotted out of existence; and the world itself would become one wide field of solitude and desolation. Yet, it often happens that the persons in other departments of labor, though dependent therein on agriculture, speak of it in derision and with assumed contempt; and that farmers themselves seem to feel ashamed that they are farmers.

It might be supposed, that a thing so indispensable to the existence as well as the enjoyment of mankind, as the cultivation of the earth, would have received in all time the highest honors and the highest place in the affections of the people, as well as all possible attention in rendering it perfect. Such has not been the case. On looking on the works of man, it is seen that agriculture has been strangely neglected; and, that this neglect has been most apparent in those most interested in its results. Great and successful efforts have been made in devising ingenious labor-saving implements for working the soil, and machinery for appropriating its products; but little among the large body of the farmers, to

improve the kind and quantity of ~~these~~ products, has been done; nor can this neglect be ascribed to any deficiency in the development of science. Science has shone forth with peculiar lustre upon the pathway of the farmer, but too often has it been wholly unheeded. A prejudice, propagated and handed down from one to another, and to which he has adhered with as much tenacity as to a choice relic of a distinguished sire, has bound him hand and foot. Till within a short period, rarely has there been found in the farmer's house a book on scientific agriculture; and even at the present time, when it may be found in one house, in fifty it will be wanting.

C. N. BEMENT.

Poughkeepsie, March 7th, 1865.

#### THE KIND OF WOOL MOST IN DEMAND.

MESSRS. TAFT, WEDDEN & Co., of Providence, R. I., in reply to interrogations from the Commissioner of Agriculture, write as follows:

"The increase in the production of wool in this country is imperatively demanded by the manufacturing interest; the increase of machinery for the manufacture of woollen goods having been so rapid in the past five years that twice the amount of wool is now consumed by it than in 1860. The increase of wool called for will apply to all grades, as none of them are fully supplied by the domestic growth. The two extremes may be regarded as most sought for at this time: the one, the fine Saxony; the other, the long combing wools.

"The introduction of the fine long-wooled Merinos has driven out and taken the place of the fine Saxony; the latter in this country being much less now than formerly, for the reason that the heavier fleeces are more profitable to the farmer. *We think the Saxony wool cannot be materially increased until we approach the point of producing nearly the amount of wool consumed by the country.*

"The Leicestershire or combing wool is grown in the United States but to a limited extent, the worsted machinery now in operation here being supplied with this description of wool from Canada, the entire clip of which is barely sufficient to supply the machinery now in operation. This branch of the woollen manufacture is being largely increased by new mills, and by the enlargement of those already established. American wools may now be quoted at about \$1 per pound for the average, whilst the coarse Canada wool, if running largely to combing, will command from \$1.25 to \$1.30 per pound, and have once sold this season for \$1.45. With a present consumption equal to the entire clip of Canada, and but a small quantity now grown in the United States, we think this kind of wool offers more inducements to the wool-grower than any other



quality. Upon the repeal of the reciprocity treaty with Canada, this wool must pay a duty of 10 cents per pound, and 10 per centum at least, and to import it from England at this time it will cost 80 cents per pound in gold, or \$1.60 in currency.

"Fine Saxony wool is in very small supply in the markets, and it is only grown in Western Pennsylvania, West Virginia, and in the southeastern part of Ohio. The manufacturers working this grade of wool are obliged to use fine foreign wool as a substitute for it, costing now in the grease about half the price of washed domestic—the domestic shrinking about 40 per cent., and the foreign about 65 per cent., in scouring."

We presume Messrs. T., W. & Co. are either manufacturers or dealers in wool, and there are several points alluded to in their letter which are of great interest to farmers. Their remark that "Saxony wool cannot be materially increased until we approach the point of producing nearly the amount of wool consumed by the country," is undoubtedly true, but what does it imply? It is not profitable to raise Saxony wool now because the coarser American Merino wool is *more* profitable, and it follows that, unless the price of Saxony wool should advance, when the time comes when Saxony wool can be raised with profit the production of American Merino wool can not be as profitable as at present.

That Messrs. T., W. & Co. do not expect it to advance, is quite clear from the statement that the manufacturers now import foreign fine wool at a less price than they pay for American grown Saxony wool. This fine foreign wool, they say, "costs now in the grease about half the price of washed domestic—the domestic shrinking about 40 per cent., and the foreign about 65 per cent., in scouring." In other words, if 100 lbs. of washed domestic Saxony wool costs \$100, and shrinks 40 lbs. in cleaning, we get 60 lbs. of cleansed wool for \$100, or \$1.66 per lb.; while on the other hand, 100 lbs. of imported wool, at "half price," would cost \$50, and shrinks 65 lbs. in scouring, giving 35 lbs. of cleansed wool for \$50, or \$1.43 per lb. The foreign wool is 14 per cent. cheaper than the home grown wool. It is clear, therefore, that Messrs. T., W. & Co. do not mean that the production of Saxony wool will be more profitable, when we raise nearly all the wool we require, because it will command a high price, but simply that "American Merino" wool will be lower. Saxony wool is now in great demand, and yet it does not bring a sufficiently high price to render its production profitable. And yet we are told that such will be the case when we raise all the wool we require. If this is so, what profit are we to expect from growing American Merino wool?

#### MUTTON SHEEP—SURFACE MANURING, &c.

EDS. GENESEE FARMER: How is it that in your statement in reference to the comparative merits of the South Down and Merino sheep for mutton, you say nothing about the *quality* of the flesh? Is it possible that Mr. Johnston claims that the Merinos are equal to the Downs in quality?

It is a strange thing that farmers are so easily influenced by the fashion of the hour. The Vermonters have put the Spanish sheep upon the highest keeping they know how, until they have produced yolk and wrinkles and weight of fleece in the dirt, equal if not superior to anything the French have accomplished by years of pampering with the same breed. Grease and dirt have sold as well as wool, and so we have had such an overwhelming demand for these sheep, that most people insist no others should be bred. It is not with sheep as with cattle or hogs. We may have a cow uniting all the good qualities required—a good feeder, good milker and with good flesh. So with hogs,—we want the animal that will give us the greatest weight of good pork at an early age, and we have nothing more to desire.

But with sheep the case is wholly different; they are wanted to produce wool as well as flesh. The Spanish sheep, of the variety now in favor with us, produces a fine felting wool, but not fine enough for good broadcloths. The wool does not answer for flannel because of its felting properties—the garments made up shrink too much. Neither will it do for heavy cassimeres, and similar goods—for which there is so much demand in our markets—or for combing purposes.

Now, a most important question to be considered in connection with the matter at issue between you and Mr. Johnston is, whether America is to import all the wool consumed in this country except that grown upon the "American" Merino? If, as I anticipate, our tariff shall be so imposed as to induce the manufacture of all these goods at home, there will be such demand for the wool of what are called the mutton sheep, that it will in a short time be in demand at its *fair value*. When that time comes, that is, when our fleeces are sold and paid for according to the number of pounds of wool, when cleansed for the manufacture, they contain, Downs and Leicesters will be found much nearer the "American Merino" as a mere wool producing animal than is now generally believed.

But it is certainly a matter of great national importance, that we should produce all these varieties of wool; and I believe that when the superior quality of the flesh and early maturity of the Downs are taken into the account, and their unsurpassed hardiness, they are, or will be when the wool is sold upon



its merit, as profitable as the Merino sheep. Where small flocks are kept, and but little care bestowed upon them, I know of no sheep that will compare with them. They cross admirably with the Leicesters, giving more size and greater length of wool.

You mention that Mr. Johnston "piles his manure in the spring, and draws out in September on grass land that he intends to plant in corn the next spring." This certainly seems a strange practice. What sort of land has Mr. J.? If it is a clay soil, most certainly we should expect better results in all respects by plowing the green manure under in the spring. If you or Mr. J. think not, why not?

I do not understand how any benefit is to be derived from spreading manure on grass land, to remain on the surface through the winter, unless it is permitted to remain in grass the next summer, in which case we should have more grass and a heavier sod, which, when plowed under, would add much to the productiveness of the soil. You say he plows up the sod just before planting. I can not help thinking, notwithstanding the high authority given for the practice, that it must result in a serious loss of the fertilizing elements of the manure. The fact that Mr. Johnston always has good crops, does not prove the practice correct. Buying stock to consume his hay and straw, and such large quantities of oil-cake to feed them, we are to expect, of course, that his lands will be in good condition.

We have in Ohio an early and very favorable spring. Grass is coming on finely, and our wheat is very promising. Our stock, notwithstanding the light hay crop of last year, and the high prices of grain, is in better condition than usual. We have but few cattle, as I believe to be the case throughout the United States. Would it not be well for farmers who think no stock will pay but sheep, to reflect upon the fact? With all the efforts that can be made to increase the number, it will take several years to bring the supply of cattle up to the demand. Last year, and the year before, our people raised but very few calves. This year I anticipate more will be raised, but nothing like the number bred in former years. Common cows, that two or three years ago were worth \$25 or \$30, are now selling at \$40 to \$50, and even at these prices, very few are to be had.

BUCKEYE.

Delaware, Ohio, April 10, 1865.

**DRAIN OFF THE WATER.**—Surface drains are by no means as good as underdrains, but still they are very useful. A furrow made by a plow will drain off more water in a day than the sun will evaporate in a week. If there is any water lying on land that you wish to plow this spring, lose no time in draining it off. It will pay for the labor ten times over.

#### NOTES BY S. W.

THE April *Farmer* is capital. I never read so good an argument before, to prove the superior value of the large variety of clover, both for hay and forage, over the small kind. If, as the writer says, it does not ripen until the timothy is fit to cut, it is invaluable, as the small clover ripens and begins to shed both leaf and blossom before the timothy growing with it is out of bloom.

A man asked me this morning how I contrived to make a heap of cow dung so loose and finely divided,—it can now be shoveled and spread as evenly as so much loose ground. The secret is, I bed my cows with hard wood turners' shavings. When bedded with straw, leaves, &c., a conglomeration takes place that nothing but rotting in a compost heap will reduce. Even hen dung is very hard to pulverize, and when reduced to small lumps they will remain months on a grass patch without dissolution.

One would suppose that in a village where stall manure is scarce and dear, every family that rejoices in a garden would make a compost heap of the leaves and refuse waste of the house, yard and garden. So far from it, many take pains to rake up all the leaves from their vines, fruit and shade trees, cabbage and corn stumps, &c., and wheel them into the broad street to be burned or scattered. This, I take it, is laboring to destroy that which nature intended should re-quicken. I endeavored to remonstrate with a man last fall who was raking up a large pile of freshly fallen leaves in his yard and then wheeling them into the center of the street. "You can't tell me," said he, "I was raised on a farm, and I don't believe in any of your book farming." His egotism enveloped and warmed him like a garment.

"When ignorance is bliss, 'tis folly to be wise."

It has been said in the Agricultural papers that corn sown in drills for fodder should not be cut until the corn has ripened its ears, and John Johnston was named as authority for it. I think Mr. J. will admit that as the corn ripens the stalks give up their nutriment to perfect the ear. Yet, if cut too early, before the saccharine is formed, the stalk will be insipid and hard to save from moulding. Mr. Wright never cuts his drilled corn fodder until the stalk is sweet. I last fall got some corn stalks of the Stowel sweet corn that had been planted too late to ripen. The leaves were intact, although they had been frozen. When dried in the hay loft the stalks were full of sugar crystals, and the cow devoured, butts and all *con gusto*.

There is an hereditary delusion among farmers generally about corn fodder. It has passed into an accepted truism, that if stalks are only saved from



the frost, no matter how long they remain uncut and exposed after the ears are ripe. So far from this, the moment corn glazes the stalks and leaves begin to deteriorate by exposure to the atmosphere. I have seen corn leaves completely mildewed and whipped out by wind and rain, before they had been touched by frost. Joseph Wright makes a great saving of corn fodder by cutting up and stacking his corn as soon as the ears are glazed. Corn leaves deteriorate like grass by standing after it is fully ripe. Frost only aids by accelerating the decomposition.

Our great woolen mill is now receiving a stock of fine Buenos Ayres wool from New York. It is in large iron hooped bundles. This wool was bought since the great decline in gold, full fifty per cent below last season's prices. Farmers have had their day of extreme prices; they can thus well afford now to sell a part of their sheep, so that we shall not have to pay twenty-two cents a pound for mutton as we do now in the village market; and John Johnston will be the last to complain if his next year's stall fed sheep should not net him "twelve cents a pound live weight." While butter has declined to half the winter's price, pork has fallen more than sixteen dollars the barrel—the rise was to the profit of the farmer—the speculator must pocket the loss.

#### VISITING FARMERS.

IN ancient times the English law required a young man, on completion of his apprenticeship, to travel over the country a certain number of years, working at his trade, before he could be licensed to make a permanent beginning for himself. The object was to compel him to become familiar with the different modes in which other craftsmen conduct the business he had learned, so that by knowing all he might become a perfect workman.

Traveling from one farm to another, to learn what was going on upon each, how this or that process was conducted, what machines were successful, which were failures, what was the most profitable fruit crop and how best to produce it, who had the most successful garden and how it was managed, with the long catalogue of items on kindred topics—would be a mere repetition of the English obligation to become perfect in the farmer's calling.

There are times throughout the year when most men can indulge in this useful recreation, and there are those who systematically devote to it a portion of every season. I have indulged in it myself, and have rarely gone anywhere without learning something that was new to me, and many times useful.

On these brief perambulations I have uniformly found the latch string of the door within sight and reach. Going in unheralded, and even anonymously, I have never been received discourteously. The house-dog may have been snappish, but the proprietor has been all suavity.—*Author of "Ten Acres Enough," in Horticulturist.*

#### CULTIVATION OF HOPS.

[Concluded from April Number.]

SECOND YEAR.—In spring the yard, as soon as dry enough to work, must be grubbed. Hoe the dirt from the hill without injuring the crown of the root. With a knife, cut off all the old vines smooth, and any runners that are seen. Never tear them off nor cut them with the hoe. At the same time examine whether there are any grubs in the hill, and kill all found. There are two kinds of grub, one which makes a beetle, with a dark hard head, and white body, with legs all on the forepart of the body. It is always found doubled up like a horse shoe. The other is a caterpillar which makes a butterfly. Both must be killed wherever found. Leave the hill nearly bare. If the stakes are in the yard they must now be set, but if not, it is best to plow first. In setting, use a common light crowbar and set about a foot deep, rather deeper for outside hills, and nearly twice as deep for the long pole at the male hill. Then plow out the yard, and after plowing take out the runners or sets. These are only found in a yard after the second year, and if well saved, are worth from fifty cents to one dollar and a half per bushel. Break them as little as possible, and do not let them lie long in the sunshine, nor be frozen while out of the ground. In setting the stakes, all the holes should be on the same side of the hill, so that in plowing you can tell how to guide the horse that he may not step on the crown. After taking out the sets, hoe the dirt back upon the hills so that the ground will be nearly level, and put on the twine. When the stakes are but seven feet high, a man can easily put it on from the ground, but a boy or girl can do it with a light stool. The twine is carried in a basket slung over the shoulder out of the way. Never tie the twine except at the end stakes, and only wind once around the others, passing at the tall polls at the male hills. Have all stakes the same length. When the vines get up two or three feet high, they must be tied. Tie four to each stake except in the outer row of hills where five or six may be tied, so as to fill the strings to the outer row of stakes. Put the vines around the stake the way the sun goes, or they will not run, and tie with soft bass matting or old woolen yarn.

Cultivate often, for it will save a great deal of hoeing. The five-toothed cultivator is best, but when the yard gets grassy, the plow is the only thing that will do the work; never let the weeds get the upper hand. The vines will need tying up as often as any leave the pole, but it must never be done on a cold day, nor early in the morning, as then they will break, and whenever one has its head broken off, it must, if not up to the strings, be taken



down, and another vine from the ground be put in its place. When the smallest vines have got a good start, three feet or more, bury the refuse vines at the foot of the stake with two inches of dirt, and never pull or cut them off, as is usually done. In a few days the leaves will rot, making manure, and the vines will make cheaper food for the grubs than those running up the stake. These vines throw out small roots, and help to make the crop for the year; besides they are the best kind of sets for a new yard the next year. Mix air-slacked lime and unleached ashes, and put on about a pint to each hill; this will help to keep away grubs, and serve as a manure.

When the tallest vines are up two feet above the tops of the stakes, go through the yard and lay them on the strings, winding them loosely once or twice around. Put the vines on the strings, while they are growing very fast, about twice a week, or when they are two or three feet long, letting them hang down six inches. When the vine has passed the first space, let it run past the stake, on to the string having fewest vines on it, and when it gets to the middle of the second string, let it hang down like an arm. Sometimes I have seen vines stopped when at the second stake, but I do not like the way so well as to let them run further.

Never put the arms upon the strings, but let them hang down or wind into each other; they will not break by hanging, and will be more exposed to sunshine and air. When they are so long as to brush the ground, lay them up on others, winding once around, and they will stay. If the vines have been so planted that the male vines cannot be told, let them run up on the strings, but mark them in the fall, so as to put in a tall poll, for, if grown in this way, the pollen will be better distributed.

**PICKING.**—The hop is ripe, when on opening it the seed is hard, and of a purple color. After that, they turn brown, and the seeds drop out, and there is a great loss both in quality and weight. Of course, in a large yard, all the hops cannot be picked at exactly the right time. If the yard is a large one, the hops will be ripe sooner in some parts of it than in others, and should be picked first, and indeed some must be picked rather too early, in order that none may be left much too long. Commence when the seed begins to get hard, and but few are yet purple. In horizontal yards this is about a week earlier than where long poles are used, and as there is no cutting off vines, they do not bleed as in the old way.

At first do not hurry up the picking too fast, as while the hops are rather green the kilns must not be filled more than ten or twelve inches deep, and it takes longer to dry them than those that are riper. After a few days, when the hops are fully ripe, it is

best to get one-half more pickers than at first, as on a good kiln the hops can be dried from sixteen to twenty-four inches deep, and two kilns-full can be dried in a day.

Those conditions of the air which produce rust in wheat, seem to have the same effect on hops. It sometimes comes on very soon after a warm shower. High land is most free from rust; the worst place is a deep narrow valley near a stream, and sheltered by woods.

Hops can be picked from the strings, either in the common way with boxes and box-tenders, or by girls with baskets without help. I like the latter way best, as it saves three-fourths of the time usually spent in tending box, and the hops are picked cleaner and faster. I will describe both ways: First, with light willow baskets which will hold three or four bushels, commence at the ripest part of the yard, loosen the strings from the stakes, and let them drop until held by the vines; they will then be about five feet high, and can be pulled lower as wanted. A large girl, or a man, can take the strings off the stakes.

Pick clean; put the fingers through between the hops in the bunch, instead of around it and strip, as is often done. Put in all the hops, but none of the large leaves, and as few of the small ones as possible. Often there is no care taken to keep out small leaves, but for a prime article very few should go in, and no bunches of more than three hops should ever be allowed in the basket.

The owner, or some very careful man, should empty the baskets into sacks as they are filled, and see that all are picked well. Where any are found with bunches of hops, or any large leaves, the picker should sort them, and pick them all out. For this the most careful man is required, and every careless girl in the yard will abuse him as much as she can. Good pickers will gather twenty-five to thirty bushels per day well, but wages should be based on about fifteen bushels for a day's work, as many girls will not pick more than that.

Sacks for carry the hops to the kiln should hold about ten or twelve bushels without packing, as the hops, if pressed in, will soon heat and turn black. The bags must never be left full of hops over night. Burlaps make good cheap sacks, and once made they last for many years. The vines are left on the strings so as to mature the root for another crop, until they are killed by the frost; then it is best to take them down, strip them off the strings, and burn them. In this way the eggs of the plant-lice are mostly destroyed. Where the picking is done with boxes, these are made of various sizes—16,872 cubic inches is the size required by a bill proposed in the last Legislature of New York, but the bill did not pass. The boxes, usually holding from



seven to ten bushels, are made about three feet long, with a partition through the middle, and two of these double boxes, with a platform three feet square between them, make a "set" for four pickers. They are of half-inch basswood, with handles at each end. A man (or a girl) called a "box-tender," who has a large basket, knife, and light stool, pulls off the arms from the vines, (they break out easily by a pull towards the root of the vine,) and with the knife cuts off the end of the main vine, which hangs down. As fast as he fills his basket, he empties it on the platform, thus leaving the main vine with most of its foliage entire, and preventing any bleeding.

When the hops are good, and the strings not more than seven feet high, one man can tend two sets of pickers, eight boxes, as easy as he can one where they are nine feet high. The man who tends box should never be required to sack the hops. Broken arms are to be thrown away when the hops on them have turned brown; for if put in, they will injure the sale of all. A man who has the reputation of picking his hops clean, and putting them up nicely, will get a little extra price for them, and find quicker sale when hops are low. The difference between "Fancy" hops and "Common sorts" is always enough to pay the whole cost of raising the crop. Only the best hops have the advantage of a foreign market. The price for picking varies from twenty to fifty cents per box. Owners usually board the pickers, and if they are treated well, he will find it all the easier to engage them another year.

**DRYING THE HOPS.**—The Kiln should be proportioned to the amount of hops to be dried. It is usually divided into four rooms. The stove room, where fire is made, should be not less than fourteen feet high, and sixteen or eighteen feet is better, with stone or brick walls and no floor; if the walls are of wood, they must be plastered to the top of the room. At the bottom of the walls there should be six air holes, one by three feet, with doors to close them tight when necessary, and if the kiln is very large there must be more than six. The stoves, usually two, are large enough to take in three-foot wood, with grate bars at the bottom, and very large doors; the pipes are carried once or twice across the room, as near the level of the top of the stove as possible, and then go into a chimney on the outside of the building. Great care must be taken not to have the pipes touch the wood-work, as it is kept so hot for a long time, as to set fire to any wood-work near it. The pipe is often run several feet from the building and turned up like the smoke-stack of a steam boiler, to make a good draft. There is a door from the stove room into the baling room, with a

light of glass, so that the man who attends the drying may see the state of the fires without going in, and on the inside of the glass is a Thermometer to show the degree of heat at a glance.

The drying room is over the stove room; usually there are joists laid across the top of the stove room, and wooden slats, one inch by two, and laid on them on edge, two and a half inches apart. On this there is laid a carpet—usually made of flax or hemp with small threads, twisted hard and woven loosely, so that the spaces between them are about 1-16 of an inch or more, allowing air to pass through it freely. It should never be of cotton.

The best kiln I have ever seen, is one which has a moveable carpet, invented by Edward France. Wires, like telegraph wires, put three or four inches apart, are used instead of slats, and no joists are used, but the wires are stretched tight by a nut on the end. The hops are put on it from a moveable walk; a plank two and a half feet above the carpet, supported from the rafters by wire suspension rods, and when the hops are on, the plank is turned on edge. When the hops are dry, the carpet is rolled off by a shaft in the store room, so that all the hops are taken off in less than five minutes, and the carpet put back ready for a new charge, without losing the heat or letting the fires go down. No sweeping is needed with this kiln, nor does any one step on the carpet.

The roof should be carried up very high, so as to have the ventilator as high as possible, and make a better draft to the kiln. This is made with a cowl which turns by the wind, or a slat ventilator is used, arranged so as to keep out the rain, while the air can pass up freely.

The store room is next the drying room, but the floor is from three to eight feet lower than the carpet, so as to make plenty of room to store hops in bulk until they are ready to press. It should have but one window, which should have a shutter to keep the room dark, while the hops are in it. They will turn brown if exposed to light. Have boards to set up, and make the end of the store room farthest from the drying room into one or two large bins, so that any damaged hops can be kept separate. Under the store room is the baling room; it has a tight floor, and is used to bale the hops, store the hop press, together with any tools not in use in the yard.

At first picking, put on the hops not more than twelve inches deep, and start the fires. Use only dry wood, as more heat can be had from dry than green wood, and where the stoves are large, the fires last better if large wood is used. Open all the air holes, so there will be a good draft through the hops. When the fire is first made, the steam passes off from the hops very fast. Keep the temperature



as regular as possible. About 180° or as near that as may be, with as good a current of air as you can get, will dry them rapidly. After making the second fire, take a pan of coals from the stove, and put on a quantity of sulphur. If the hops are nice and free from rust or mould, one pound is enough for bleaching a kiln, but when very rusty, from two to five pounds are sometimes used. Put the pan in the centre of the room, and shut the door—the fire must be well made, for it cannot be mended for half an hour. When half the stems will break on bending them, the hops are dry enough. This will be in from eight to ten hours.

In using the common kiln, the doors are thrown open, the fire goes down, and the kiln is cooled for two hours, so that a man can go in to shovel off the hops, which he cannot do while it is hot. With a rake, shovel or broom he throws the hops off upon the cooling floor of the store room, and sweeps the carpet off clean. He must wear shoes without nails, or he will tear the carpet.

Much of the flour, or Lupulin, always falls through into the store-room—sometimes two or three pounds from each kiln full. What falls on the stoves and pipe must be brushed off or it will smoke the next charge. With the France kiln there is no sweeping; the hops are taken off when first dry, no flour falls through and the hops are left whole; the next charge of hops is put on, and the heat is mostly saved, the fires not being allowed to go down at all. Two men have charge of the drying, where the kiln is run all the time, each working half the time. The hops should be left on the cooling floor, where they are thrown, until the next charge is nearly done; they are then shoved back a little, to make room for more, and so on until they get into the bins at the end of the room, two or three charges being in this way kept spread as much as possible all the time.

When the hops have been neglected by the dryer going to sleep, or any other cause, they become too dry, which is known by their feeling harsh, and most of the stems snapping. Shut the air holes, put a quart or a little more of salt upon a pan of coals in the stove room, and let the charge stand a short time—this will toughen them.

It is best to have pickers enough to keep the kiln running all the time. Be careful to get hops dry enough.

**BALING AND PRESSING.**—The baling should be done in from four to six weeks; we usually take a rainy time when nothing else can be done, as then hops handle best.

The Harris Press is the best I have ever seen for baling hops—it is made by Seneca Gifford, Waterville, Oneida county, New York. It is cheap and

good—costing now but fifty dollars. Baling cloth is made on purpose for hops. A good quality should weigh about one and one half pounds per yard. Never use Gunny-cloth nor Burlaps. Twine for sewing should be small, strong and free from bunches, so as to sew easily; the needles used are common bent sail needles. A dozen pointed iron skewers are wanted to hold the cloth while sewing—use tallow instead of wax upon the thread, so that it will slip easily.

Cut the sacking for the bottom piece one yard longer than the bottom of the press, and the upper one six inches shorter; save one piece of each kind until the last bale, for a measure, so as to have them all uniform. When a nice hop is grown, it should be kept as whole as possible. Have side boards to fit in from the top of the press to a trap door in the floor of the store room, and a wooden box there of the same size to shovel them into. The side boards to come out when the hops are below them. Take care to fill the corners of the bale-full, so as to make a square handsome package. Bales are all the same size, weighing from 150 to 240 pounds, according to the degree they are pressed and how well seeded they are. The baled hops, if kept stored long, must be in a dry room set on end, and a few inches apart, so that the air can circulate between them.

**SELLING.**—When hops are high, almost any will sell, but when they are low only the best sell readily. At two years old they are worth but half price, and are worthless at four or five years. Always sell the first year. By keeping the run of the market, both in this country and Europe, the grower can form an intelligent opinion of what the price should be. It varies from eight cents, at the lowest, up to fifty or sixty cents, as at present, for very fine qualities, but the average for the last forty years has been seventeen to eighteen cents. The cost of raising in the manner described is from four to six cents per pound. The average crop all through the country is near 1,000 pounds per acre (when the work is well done), but I have seen 2,500 pounds per acre raised on a large yard. On two large yards in Morris, Otsego county, N. Y., the average for four years past has been 1,700 on one, and 1,800 on the other, both being trained on strings.

**INSECTS.**—For two years past, the hop crop has been very much injured, even ruined in some places, in New York, by the Hop Louse. This comes early in July, and unless prevented, it increases until it ruins the crop. I insert from Harris' "Insects Injurious to Vegetation" a part of the description:—"The winged plant lice provide for a succession of their race by stocking the plant with eggs in the autumn; these are hatched in due time in the



spring, and the young lice immediately begin to pump up sap from the tender leaves and shoots, increase in size and in a short time come to maturity; in this state it is found that the brood without a single exception are females, which are wingless, but are in a condition to continue their kind immediately. Their young, however, are not hatched from eggs, but are produced alive; and each female may be the mother of fifteen or twenty young lice in a single day. The plant lice of this second generation are also wingless females, which grow up and have their young in due season—and thus brood after brood is produced even to the seventh generation or more without the appearance of intervention of a single male through the whole season. This extraordinary kind of propagation ends in the autumn with the birth of a brood of males and females, which in due time acquire wings and pair. Eggs are then laid by the females and with the death of these winged individuals, which soon follows, the species becomes extinct for the season.

The bark of poles, and any old rubbish, vines, etc., in the hop yard, will be covered with the eggs of these plant lice. When sawed stakes are used and coated with gas tar, not an egg will be laid on them. The old vines should always be burned up in the fall.

The enemies of the louse are the Lady bug (*Coccinella*) while in the larva state. It is a small flattened grub, of bluish color, usually spotted with red or yellow, and has six legs near the fore part of the body; "they are hatched from yellow eggs laid among the lice in clusters." Another is the grub of a "golden-eyed lace winged fly"; "it is a long slender grub with a pair of large, curved, sharp teeth." Harris says it will kill one louse a minute—"its eggs are on short hairs among the lice." "Small two winged flies, black, with yellow bands, lay their eggs among the lice—they make maggots which destroy large numbers."

By taking care to save what are found of these, I think the lice will be kept down so as not to ruin yards as is done in some cases now. Every hop grower should have Harris' book. The insects which prey on his crops are described there, with some hints towards their extermination. Ants should be kept out of the yard as much as possible; they are said to take care of the lice, while they are few, and transport them to vines where there are none. Drive away by coal oil or gas tar put on their hills. After the first year, Lady-bugs and other enemies of the lice increase so much as to save the yard from much damage. There are several Caterpillars which live on the hop vines, but I have never seen them plenty enough to do much damage, except the one which lives in the ground and eats the roots and the vine near the surface.

If the grower examines the hop yard closely, he will soon learn to tell his enemies from his friends. Crows and other birds are of great use in eating beetles and grubs, and snakes also devour large numbers of them. Last spring, I found more than half the hills in our yard dug into by skunks, searching for the grubs, and where they had been I could find no grubs. The little harm they do in sucking eggs, is far more than made up by their work. A family of skunks will do as much towards taking out grubs, if you will protect them from the dogs, as a man can do. They work in the night.

Barn swallows were on our yard last summer all the time and appeared to live there, going only from the barn to the yard, where they got their whole living.

MANURING.—Every fall the yard should have two forkfuls of *coarse* manure on the top of the hills, partly as a protection to the vine, and from the first to the middle of July it should have as much, or, if the ground is poor, more well rotted fine manure, which has been fermented enough to kill any seeds which were in it. This should be put on, and covered immediately with an inch or two of dirt—ashes are often mixed with the manure, but I prefer using them with the lime on the surface of the ground. I have seen plaster used with good effect. Old bones are good to bury in the yard, where any amount of them can be had. So also are the sweepings of blacksmiths' shops. In this country hops are now mostly raised in Central New York, some in New England, and a few in the Western States. I have seen them growing wild in Iowa, Missouri, and Kansas fully as fine as the cultivated ones; they grow wild on all creek bottoms, where the soil is not overflowed in the winter, and where they are not killed by fire, producing best in those bottoms formed by the wash of limestone hills. The few yards in Iowa and Wisconsin produce large crops of the best quality of hops.

PLOWING.—It is of course desirable to plow as much land in a day as possible, but it is a mistaken economy to flop over furrows 12 to 18 inches wide, especially for spring crops. Better plow an acre and a half 8 or 10 inches wide, than three acres in this common but unphilosophical manner. The object of plowing is to pulverize the soil, and let in the air and light. On this account, the operation should be deferred till the land is dry enough to turn up mellow, for no amount of harrowing and rolling will make a good seed bed on soil plowed when wet.

ONE of the commonest mistakes made by small farmers, is that their land is over-stocked and their cattle under-fed:

"Full stock, half profit;  
Half stock, full profit."



## TAKING THE HINT.

It is truly surprising to see how slow some farmers are to take the hint. It seems as if the old adage held true at this day,—“*When it rains porridge, their dish is always bottom upwards.*” A wide awake farmer will try and improve every opportunity for self-culture and improvement of his farm; he does not set and doze all the long winter evenings, not he; you will find him poring over works relating to the farm, and the discoveries made in the best application of manure, and the results, and he arranges in his mind what kind will be best adapted to his soil—phosphate of lime or guano—and his neighbor over the way is forever pondering over the hints thrown out by Nature, and yet he does not take the hint. The frost destroys about one-half of his apple blossoms, and he prognosticates a small crop of apples; instead of that, the half that remains are larger and finer flavored than usual, and the trees, instead of being exhausted, are ready for another crop—the next year—and yet, forever slow to take the hint, does not profit by this lesson of Nature, and thin out his fruit every bearing year. But the next bearing year you will find his orchard overloaded with fruit of a small, inferior kind, consequently unfit for market, and yet you will hear him boast of his fine crop of large ones last year, and the good price he obtained by the barrel—hints are thrown away on him—his dish is upside down.

A farmer raises the best kind of carrots on a spot of ground where the wash of the barn-yard ran into it after every hard shower. Did he take the hint and apply liquid manure? Not he—his dish was bottom upwards. A shrewd farmer, whose dish is kept right side up, goes in for the modern improvements, he subsoils his land and raises large crops, and his farm is looked upon as a remarkably productive one, and for years the farmer showed the utility and thrift of deep handling, and yet not a neighbor took the hint and left the old style of skimming the surface; that *progressive farmer* sold his farm at a high figure. They all supposed it was a wonderfully productive farm; and the purchaser was one of those old foggy men who dare not leave the beaten trail of his father before him, and the sequence was the old style of *surface scratching*—and considers himself a cheated man, from the fact that his crops are no better than his *neighbors*'. He was slow indeed to take the hint, and his dish was wrong side up all through life,—and why? Because he persistently closed his eyes to all modern improvements, and considered all the advertised machines to save labor as so much gas and humbug, to get money from the greenhorns, but they couldn't come it over him—his eye teeth were cut.

A staunch old farmer complained that his soil was too loose and light. Ashes were suggested as worth trying. “Well, now you mention it, I believe it will do good. I bought part of my farm from a man who was a wonderful fellow to save up ashes, and around his cabin it lay in heaps. I removed the house, and to this day I notice that when the plow runs along that spot, the ground turns up moist and close grained.” *It is wonderful he was so slow to take the hint.* Nature may throw out hints to some farmers all the way through life, and yet they will stubbornly refuse to listen to his teachings, and why? because their great grandfather did so they must do likewise, instead of trying experimental farming, and striving to make the labor of farming as light and cheerful as possible. They go at it wrong end foremost, and so continue through life. How absurd the idea of a farmer running in debt for more land than he can cultivate to advantage, buying *unnecessary* articles, and doing without those which are of vital importance. Want of economy, neglecting the payment of small accounts, till they accumulate in such a manner as to afford him a *run of business*. Independent of his farming operations, keeping unnecessary animals to devour his produce. One dog, if fed to the full, is as *expensive as a pig*, without any return profit, unless we take into account his very little service of “frightening the cattle, and making five times as breechy as if driven out quietly,—of his biting your neighbors' sheep and you having to pay the cost, and making ill feelings between neighbors for a life-time; keeping more horses than can be used to advantage, indicates bad economy; horses require more fodder, and of better quality, than any of our domestic animals, hence, if not profitably employed, they are a drawback on the farm.

The farmer who has any reason to expect good luck, must take the hint and have a good pile of wood up to his door, surely enough to last one year. See that the fences are repaired, and the cattle are restricted within the limits assigned them, lest they become ambitious and commence a *fillibustering expedition* to acquire more territory. To have your dish right side up, take the hints thrown out for you by Nature; be prompt, let everything be done in good season, keep interest money and small debts paid up; see that you have the *Genesee Farmer* sent to you promptly, which will keep you posted up in all the various improvements of the farm; do not be afraid to try a new experiment which offers to be of a labor saving nature, for at the present high price for farm labor, it is of deep importance to all farmers to study economy. J. L. HERSEY.

Tuftonborough, Carroll Co., N. H., 1865.

ALL wet lands should be drained.



## WHITE WASHING.

As some kinds of labor may be performed at a season of the year when the weather is not suitable for out-of-door occupation, it may be well to look around and see what may be necessary within doors. Among these is the white-washing of rooms. In the first place, see if there are any cracks in the plastering, or shrinking of wood-work from it. If so, mix a little calcined plaster and quick lime together with water, a little at a time, and with an old case-knife, fill up all the cracks with the paste. Dip the brush in water and smooth down the surface of the paste before you commence white-washing. If you have no calcined plaster at hand, put a little plaster of paris in a skillet, heat it over the fire so as to make it appear like boiling, but do not keep it in that condition too long, and you will have the calcined plaster. This paste is also excellent to fill up the cracks in floors before painting or carpeting, as it makes a smooth surface and helps keep out the cold.

**TO PREPARE THE WHITEWASH.**—Slake quick-lime in water a few days before using it. It will then be completely soluble, and free from the coarse particles that exist when first made. A still better article is Spanish whiting, which may be bought at a cheap rate. Mix a little calcined plaster, say one-fourth as much as the whiting, and it will look all the better. A little glue will render the wash hard for walls. The glue should be dissolved separately. If you want to color the wash, any apothecary or painter can tell you what you want. A wash mixed with glue or calcined plaster, should be used immediately.

**HOW TO APPLY IT.**—Always have your work finished behind you, i. e., draw your brush from your work, you will then leave it smooth. Go over the second coat across the first coat. This will take out the streaks, and leave it smooth when dry. A good brush is absolutely necessary to make work look well. Always soak the brush in moderately warm water before using it, and clean it thoroughly when your work is done. Avoid having your wash too thick. It is a *wash*, and not a *paste* that you want. When the water evaporates, a thin coating of pure lime is left, which perfectly covers the old surface; this soon absorbs carbonic acid from the air, and remains unchanged till acted upon by smoke or dust.

To prepare a wash for fences and the outside walls of buildings, put one peck of lime in a barrel, and pour on a little water so as to *drown* the lime, as it is called. Let it swell and crack and gradually add the water till it is of the right consistency, then add four quarts of coarse salt dissolved in water. This will render the coat hard, and not so liable to wash off. A convenient way to white-wash slats for a fence before they are nailed on, is to have a box a

little longer than the slats, fill it with the wash, and with a pair of tongs dip them into it. Keep the barrel covered when not in use.

In patching a piece of plastering, always cut out a square piece from the old plaster, and see that the mortar fills up the space even with the old. We never like to see an irregular blotch overhead, when it can be so easily avoided.—*Maine Farmer*.

## WASHINGTON A GREAT FARMER.

It is not generally known that the father of his country, while bearing a nation's cares upon his shoulders, was one of the most extensive farmers in the States. I commend his views on the raising of tobacco to the careful and prayerful consideration of the Connecticut valley farmers, who persist in raising the harmful weed. I copy from *Washington's Political Legacies*, to which is annexed an appendix, containing an account of his illness, death, etc., etc., Boston, 1800: F.

"Colonel Washington was one of the greatest landholders in North America; his estate at Mount Vernon was computed in 1787 to consist of nine thousand acres, under his own management and cultivation. He had likewise various other large tracts of land in other parts of the State; his annual receipts from his estates amounting in 1776 to four thousand pounds sterling, and it was then believed would have sold for upwards of one hundred and sixty thousand pounds sterling, which is equal to more than \$666,000. What his revenue was recently, we do not know, but there can be little presumption in supposing it was much increased under his prudential guidance and practical economy. He allotted a part of the Saturday in each week to receive the reports of his overseers, which were registered progressively, to enable him to compare the labor with the product of each particular part, and it is affirmed that this weekly retrospect was duly considered by this great man during the stormy movements of the revolutionary war, and his Presidency of the United States. He has raised in one year seven thousand bushels of wheat and ten thousand bushels of Indian corn on his Mount Vernon estates; in a succeeding year he raised two hundred lambs, sowed twenty-seven bushels of flax seed, and planted seven hundred bushels of potatoes; at the same time his domestics manufactured linen and woollen cloth enough for his numerous household, which amounted to nearly a thousand persons. With him regularity and industry were the order of each day, and the consequent reflection made them all happy. Though agriculture was pursued by him with such undeviating attention, he used it rather as the means of his pleasure than the end of his wishes, which concentrated in the labor to improve the well-being of his fellow-citizens; and to effect this, he desisted from planting tobacco, to employ himself in the introduction and fostering such articles of vegetation as might ultimately tend to a national advantage."—*Congregationalist*.





## GARDEN WORK FOR MAY.

MAY has charms for the gardener, superior to any of the preceding months. The weather is milder—"fragrance fills the air"—and he begins to reap the reward of his previous labor. The seeds sown in March and April have germinated, and are clothing a portion of his garden in verdure; and if he has been wise and provident in past years, he can furnish his table with such vegetables as Asparagus, Rhubarb, and Spinach, and Lettuce and Radishes, sown this year.

But May also brings her labors and vexations. An *unbidden* verdure will appear, which, if not immediately, and vigorously assaulted, will soon gain ascendancy over, and choke down the tender vegetables which he has sown.

At no time can weeds be so easily overcome as when they first make their appearance; for if neglected, they soon strike down their roots, interweave them with those of useful plants, and can only be eradicated with great labor and at the imminent risk of destroying more or less of the crop.

Then don't wait for the weeds to get deeply rooted, but run the scuffle-hoe between the rows as soon as it is possible to follow them. Indeed, if pains were taken to place a stick at each end of every row, at the time of sowing of such crops as are a long time coming up—onions and carrots for instance—the gardener could at any time, by stretching his line between the sticks, follow the row with the hoe before the plants are visible.

Transplant from the hot-bed this month, whatever is left in it designed for the open ground. Tomatoes, Cucumbers, Melons and Egg Plant should remain until toward the latter part, when no danger is to be apprehended from frost.

Sow in open ground, Beans, Beets, Carrots, late Cabbage and Cauliflower, Corn, Cucumbers, Lettuce for succession, Melons, Nasturtium, Okra Parsley, Parsnips, Peas, Potatoes, Pumpkins, Radishes, Sal-sify, Squashes, (summer and winter,) and Turnips.

*Pole or Running Beans.*—Butter, superior to all others for string beans—the pods remaining tender a long time—London Horticultural, White Cran-berry, Scarlet Running, and Large White Lima.

The dwarf varieties do rather better when sown in drills, say two inches deep, and twenty apart.

*Beans, Dwarf or Snap.*—Early Mohawk will bear most frost, and will do to plant early in the month, to be followed by Early Valentine, and Early Rachel, Rob Roy, Refugee, and Marrowfat and White Kidney for winter.

For pole beans, procure poles of oak, hickory, chestnut, or cedar, from six to eight feet long; set them firmly in the ground three feet each way—plant three to five beans around each pole—thinning to three when fairly up. It is well to put a little manure under the Limas, as their great excellence will repay extra effort.

*Beets.*—Sow the latter part of the month the Long Blood for winter. Hoe and weed those sown last month. They would bottom better if thinned to three or four inches, but some prefer to leave them until they get large enough for greens, and then thin them.

*Cabbage.*—The kinds mentioned last month may be sown early in this—hoe, weed, and thin to one inch.

*Cauliflower.*—Thorburn's Nonpareil is most certain to head—Lenomardo is the largest grown. Cultivate the same as cabbage.

*Celery.*—Should be transplanted from hot-bed into a rich, warm bed, three inches apart each way.

*Carrots.*—Can be sown any time this month, in shallow drills, eleven inches apart. Long Orange and Long White are the best kinds.

*Corn.*—Plant after the 10th, Extra Early Dwarf Sugar, Early Darling's Sugar, Early Eight-Rowed Sugar, and Stowell's Evergreen. The latter is very sweet, and remains soft a long time.

*Cucumbers.*—Early Russian, Early White Spined, Long Green. Prepare the hills by digging in a shovel full of well-rotted manure, sow about a dozen seeds to a hill, and cover half an inch. They can be transplanted from hot-bed on hills thus prepared. Four feet apart is the proper distance, and four plants are enough to leave in the hill.

*Musk Melons.*—Prepare hills as for cucumbers, transplant from hot-bed the latter part of the month, or sow seeds, earlier, of Fine White Japan, Fine Nutmeg, Green Citron, or Persian.

*Water Melons.*—Early Mountain Sprout, Goodwin's Imperial, Ice Cream, and Orange, are the better sorts. Should be planted six feet each way, and cultivated as cucumbers.

*Nasturtium.*—Is ornamental as well as edible, and is not much out of place in the flower garden. There are running and dwarf varieties. The former should be sown near the fence, or some unsightly object which it is desirable to cover. Sow the latter part of the month, covering one inch, and thinning to one foot.



**Okra.**—Improved Dwarf Green, Long Green. Sow the latter part of the month, in drills three feet apart, and thin to one foot. The pods are used while green and tender to flavor soups, or sliced and dried for the same purpose in winter.

**Parsley.**—Extra Curled is the best kind. The seeds should be soaked and sown in drills one inch deep and fifteen inches apart. Thin to four inches.

**Parsneps.**—Sow Guernsey or Cup, and Long White, early in the month, the same as parsley.

**Peas.**—Sow for use late in the season, Champion of England, rows four feet apart, Blue Imperial, three feet, Bishop's Dwarf Prolific, two feet, and Harrison's Glory, three feet.

**Potatoes.**—Plant early in the month, the Rochester Seedling Mercer, Fluke, Peach-Blow, or any varieties that have proved good, about 2½ feet each way. If the land is poor, a small shovel of well-rotted manure, or compost, to each hill, will increase the crop. I prefer fair sized potatoes for seed—one tuber divided into three parts to a hill.

**Pumpkins.**—If planted in garden, Large Cheese and Cashaw are the best. Should be planted as water-melon.

**Radishes.**—Long Scarlet and White Summer Turnip may be sown for succession.

**Salsify or Oyster Plant.**—Sow Long White, in drills fifteen inches apart, half an inch deep, and cultivate the same as parsneps.

**Squashes.**—Sow in early part of the month, the same as cucumbers, Early Golden Bush, Early Green Striped Bush, Early White Scollop Bush and Summer Crookneck, and in the latter part, the same as water-melons, Boston Marrow, Hubbard, Winter Crookneck, Honolulu and Yokohama.

**Turnips.**—Red-Top-Strap-Leaf can be sown for succession, although I do not think much of turnips in summer.

**Tomatoes.**—The tomato has become such a general favorite, as to merit a good deal of attention. As the cabbage, &c., is removed from hot-bed, it should be transplanted into their places, giving it more room, and making it stronger. It may remain in hot-bed until nearly in blossom, then, when all fear of frost is past, carefully transplant it into tolerable good ground, four feet each way.

#### SMALL FRUITS.

To insure a good growth the first season, the small fruits should all be planted early in April, but those who failed to do so, can still plant strawberries and blackberries. The other small fruits will probably be too far advanced in leaf to transplant with success.

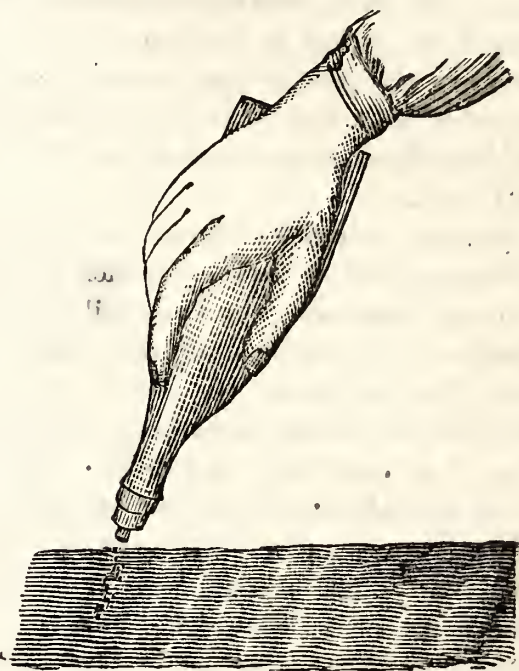
In planting raspberries and blackberries, the planter, especially if a young one, will feel a strong temptation to leave on most of the canes, that he

may see some of the fruit the first year. This is very bad policy, as it prevents the formation of wood for the next year's crop, and *permanently* affects the vigor of the plant, while at the best the first year's fruit will amount to but little.

Let it be the aim of the gardener to get as good a growth of strong canes as possible, removing all but four or five of the stronger ones. Small fruits repay thorough cultivation quite as well as vegetables. I have caused a luxuriant growth of strawberry vines, in one of the driest of seasons, by passing with the cultivator, frequently, between the rows.

Those who have been accustomed to grow currants along the fence, in the sod, would be astonished at the change which culture and pruning would produce in the size and productiveness of that important fruit.

P. C. R.



SEED DRILL.

THE *Gardeners' Monthly* says the above is a very simple and at the same time a very expeditious and effective mode of planting small seeds. It is a bottle with a hole in the cork of a size to accommodate the size of the seed. If the seeds are extremely small, and it is necessary to sow them thinly, mix the seed with any fine sand before putting it in the bottle.

#### THE LAWN.

THE *Horticulturist*, in an article on "The Lawn," advises, after a thorough subsoiling or trenching the ground, to manure it, and kill the weeds by sowing buckwheat and plowing it in as soon as it is in flower—then, after allowing it to lie for a short time, harrow well, clean from stones, and sow grass seed, putting in more buckwheat at the same time, which will shelter the young crop, and, as it will be cut down by the first frost before coming to maturity, will form a good top-dressing for the winter.



## HEMLOCK SPRUCE.

THE Hemlock Spruce, scarcely rivalled in beauty by any known evergreen in the world, has been treated in this country with a strange neglect, partly from its being so common in its uncultivated state, and partly from a prejudice that it is a stubborn subject to manage. But these objections are not entitled to consideration; for, in the first place, the hemlock for decorative purposes, is not so common as many others; and, secondly, under proper treatment, there is no difficulty whatever attending its cultivation. We have moved hundreds of hemlock trees without scarcely any failures. Our practice has been to take up the young plants—six to twenty-four inches high—from an open field or the southern side of a wood, where they are exposed to the light, and where the soil is sandy or loamy, and free from cobble stones. Removing them at the usual time of spring transplanting, and even as late as the last of May, with as much earth as possible adhering to their roots, and always on a cloudy or rainy day in preference to fair weather, we have set them almost on top of the ground, in nursery rows, subjecting them afterwards to the same treatment that other evergreens receive. The hemlock, until well established, is of rather slow growth. Although it bears shearing well, and makes a most beautiful hedge, its most effective position is where it is grouped by itself, or along the borders of belts and groups composed of other evergreen species. In order to produce a sufficient branchiness near the ground, we have sometimes had good success by planting two or three small hemlocks crowded together in the same hole, and treating them afterward as if they formed but a single tree. The hemlock submits very kindly to this often convenient expedient.—*Magazine of Horticulture.*

## PROFITS OF FRUIT GROWING.

THE author of "Ten Acres Enough," says in the *Horticulturist*: "Looking more carefully into this matter of the profit realized from all descriptions of fruit growing, and running over only two or three authorities on the subject, multitudes of instances are to be found where extraordinary gains are annually realized without apparent care or skill. Some years ago there was an orchard of 70 Mayduke cherry trees a few miles below Philadelphia, the daily sales from which, during the season, amounted to \$80. I have this week seen an Amber cherry tree, growing in New Jersey, from which \$60 to \$80 worth is annually sold, and the owner declares that if all the fruit were gathered, and at the right time, the product would be \$100. From twenty apple trees of the Early Redstreak and the Early Queen varieties, growing near Philadelphia, 300 bushels of

fruit have been gathered, which sold for \$225. A single Washington plum tree, in a city garden, has been known to yield six bushels of fruit, worth \$10 per bushel. A vineyard some sixteen miles from Philadelphia, occupying three-eighths of an acre, has produced \$300, when the grapes sold for only eight cents a pound, or at the rate of \$800 per acre. A single Catawba vine, in the same neighborhood, has produced ten bushels, worth \$40, at market prices. I have seen the Catawba clambering up the side of a barn in Delaware, and when only four years old, yielded hundreds of pounds of grapes."

## ATTEND TO THE CURRANT WORMS.

IN this section we can no longer grow currants in the old-fashioned negligent, hedge-row fashion. The caterpillars will enforce a better system of training and cultivation. The bushes, instead of being allowed to throw up suckers, must be trained to a single stem. Then let the shoots be well shortened in and all useless wood cut out, especially from the centre. This will increase the vigor of the bush. The caterpillars when they appear can be shaken from such bushes and crushed with a spade.

Hellebore powder dusted on the bushes soon after the leaves appear, and continued occasionally, will keep off the fly that deposits the eggs on the leaves, and it will also kill the caterpillars, should any appear. It is the only sure remedy that has yet been discovered. Quick lime dusted on the bushes while the dew is on, and repeated two or three times a week, will check the ravages of the caterpillars, and on properly trained bushes, of vigorous growth, with no suckers, will frequently ensure a crop of currants.

In England, it is said that coal ashes spread three or four inches thick on the surface of the soil around the bushes, will greatly lessen, if not prevent, the attacks of this caterpillar. We do not see how they act, and merely throw out the hint for consideration.

On old currant bushes that are grown up into a hedge, little can be done to save the immediate crop. The best thing is to cut out all the suckers from the bottom and from the bush itself, and shorten in the long shoots. It is not too late to do this now. Cut out all the wood that can be spared. Fork up the ground around the bushes, and make it clean and smooth. Much may be done in this way. The removal of the suckers, and shortening in the long shoots, will throw the sap into the bearing portion of the bushes, and ensure a more vigorous and healthy growth. Then dust the bushes repeatedly with lime.\*

\*Some writers recommend air-slaked lime, under the supposition that it is more caustic. But this is a mistake; water-slaked lime is stronger than air-slaked. Air-slaked lime is just as much water-slaked as any other. It obtains the water from the atmosphere. But at the same time it attracts carbonic acid also, and this to the extent to which it takes place, converts the lime back again into a carbonate and destroys its causticity.



We may add that there are two or three broods of caterpillars during the season, and even those who use means to destroy the first brood while the fruit is on the bushes, are apt to neglect them afterwards. This should not be, as the worms not only destroy the leaves and thus weaken the bushes, but greatly increase in numbers, and will prove as destructive as ever next season.

On the other hand, if the caterpillars were all destroyed during the season, there would be few to trouble us the following year. We can still raise as good currants as ever—in fact much better, as we have choicer varieties—but we must use more vigilance in destroying the worms, and more care in training the bushes. The currant is a healthy and useful fruit, and is worth a little effort to secure a plentiful crop.

### THE WIDOW AND HER GARDEN.

THE healthiest looking fruit trees we are acquainted with belonged to the late Widow F—. Her husband died some years ago, leaving her a small farm of eight or ten acres. Report says several men were desirous of helping her to take care of it, but she respectfully declined their polite offers. She attended to her own affairs, and no man could have done so with more energy and skill. Her crops were the best in the neighborhood. Everything was neat and trim on the premises. She painted the house and the fence in front of it. Not a screw was loose, or a tool out of its place or in need of repairs. She managed her own hot-bed, and pruned her own vines and fruit trees. No fungus invaded her little realm. Every week she was seen washing her trees with soap suds, and while others in the neighborhood were covered with lichens and moss and insects, the bark on her trees was as smooth and bright as her polished mahogany table. Her apples were not spotted, and the pears did not crack. No caterpillars devoured the leaves from her currant bushes, and the bugs and aphides kept at a respectful distance from her roses. The curculio concluded to seek plum trees where he was less frequently disturbed, and the striped bug, frightened at the early visits of the fair gardener, left the premises with a sigh, knowing that he could find no sweeter melons or crisper cucumbers. He was a lucky bug that escaped those quick eyes and active fingers.

But the widow is gone. Stricken down in the midst of her labors, she and her only child are laid in the grave. We mourn her loss: For one who shows us what energy, perseverance and skill can do in the cultivation of the soil, and in increasing the productiveness of our fruit trees, affords an example which can ill be spared.

### ORCHARD CULTIVATION.

THE cultivation of orchards is one of those mooted questions which for a long period has disturbed the horticultural community, and yet there would appear to be but one rational side to the question; and that is, all orchards should be tilled. It is simply nonsense to expect that a tree will produce and mature large quantities of fruit, for any considerable period, without manuring of some kind to replace the elements which the fruit carries away. While the cultivation of an orchard may not prove remunerative, so far as the crop itself is concerned, it undoubtedly, if judiciously managed, improves the condition of the trees, and consequently the quantity and quality of the fruit. We have known orchards bear fruit well, which for many years were permitted to lie in grass, but eventually they gave out, and ceased to be productive. On the other hand, we know of orchards which for thirty years have been cultivated as regularly as other portions of the farm, and the results have been the continued health of the trees, and unless destroyed by frosts, a regular average annual yield. The stirring of the soil appeared to impart new energy to the trees. They not only presented a healthy and vigorous appearance, but yielded handsome returns yearly.

The crops, it is true, may not have been as luxuriant as on those parts of the farm not so much shaded, but every bushel of oats, corn, potatoes or turnips might properly be set down as so much clear gain. It is well to remember that deep plowing in an orchard is not advisable. A good evidence of the value of cultivation is shown by the fact, that when trees run to wood, and yield little or no fruit, the luxuriant growth of the wood can be readily checked, and fruitfulness promoted, by putting the orchard in grass for a couple of years. If, at the end of that period, shallow plowing is resorted to, the beneficial effects will be apparent to the most casual observer.—*Culturist*.

### MANGOLD KRAUT OR SWISS CHARD.

A CORRESPONDENT of the *Country Gentleman* recommends this for greens. He says:

"Chard is equal to spinach. It is easy of cultivation; it harbors no insects, and is emphatically of clean habits. It is wonderfully productive. From a bed 15 feet long, containing five rows, the writer raised, in 1864, enough to supply a family of ten persons twice a week with greens from June to October, and gave at least ten bushels to his neighbors and a few messes to his cow. The seed was brought from Switzerland. Those who raise chard once will plant it every year, if they can procure seed. Cooked properly, it is delicious and wholesome; uncooked, it may be used as a substitute for lettuce. The Swiss make pies of it, which they devour with great *gusto*."



**"SPIRIT OF THE HORTICULTURAL PRESS."**

A FRIEND who looks over our exchange papers for us and extracts whatever is likely to prove interesting to our readers, says that under the heading "Spirit of the Horticultural Press" we might write "*Grapes*," and this would cover the whole ground. There is some truth in this remark. We are ridiculously inclined to ride hobbies. It seems to be easy to get up an excitement about anything. There are a great many people who seem to forget that nothing good can be obtained in this world without labor. They are continually in search of some easy method of getting a living, and are the ready dupes of every new scheme for getting suddenly rich that presents itself. Sheep among farmers, and grapes among horticulturists, are now the rage. By and by we shall have a chicken fever again, and perhaps some one will discover a big potato that will yield a thousand bushels per acre, on the poorest land, without cultivation. Some years ago a distinguished agricultural chemist of Scotland, himself remarkable for his industry, but not for his amiability, was continually bothered with farmers who wanted an easy method of getting large crops. Losing all patience, he said to one of them: "Go home and attend to your farm. You want to live without work, and I know of nothing in chemistry that will enable you to do so."

Grapes are an excellent fruit, and we should like to see a hundred bushels raised where one is now grown, but there are other things in the world besides grapes,—though we should be ignorant of the fact did we depend entirely on the horticultural press for information!

**BURN UP THE RUBBISH.**

FIRE is a great purifier. It is astonishing what a change for the better can be made in the garden and around the house by raking up and burning the rubbish. If any of it is valuable for manure, let it be wheeled to the compost heap, and then set fire to the remainder. Go where we may, rubbish of all kinds meets the eye. In the country, branches of trees are thrown into the fence corners and there allowed to lie and rot. Chips, old rails, stumps of trees and decaying wood, in a variety of forms, are found on almost every farm. They are unsightly objects, but this is by no means their worst feature: They are the prolific source of fungus in all its multifarious forms. And fungus is becoming the greatest pest in American horticulture. The cracking of the pear, rotting of the grape, and specks on apples, are all caused by fungus, while rust and mildew are only different names for different forms of fungus growth.

In the garden and orchard, everything that will

not rot and make manure in less than a year should be at once gathered up and burnt. The importance of doing this promptly is not generally understood. If the branches of trees, potato tops, and woody matter of all kinds could be charred, instead of burnt, it would make excellent manure. And in many instances this can be done without much trouble. Old sods from waste places in the garden can be obtained to cover the heap, and they will themselves be converted into a most useful fertilizer. Vegetables of all kinds delight in such a manure. It is free from weeds, acts quickly, and makes the soil light, warm and porous. A gardener who once uses them will never again, if possible, be without a supply.

**HOGS IN THE APPLE ORCHARD.**

NOBODY sends such apples to market as my neighbor John Jacobs. He always has apples to sell, and gets the highest prices. Folks prefer fair, large apples; and such are always packed in Jacobs' barrels. You might search them with a candle, and not find a knotty fruit or a worm hole. Such Rhode Island Greenings and Roxbury Russets I have never met within the old States. They are as handsome as anything in the virgin soils of the west.

I was going by Jacobs' orchard last summer, and I had the curiosity to call and examine for myself. Says I, "Neighbor, what is there in your soil that makes such smooth, large apples? They are a third bigger than anything I can get, and my trees look as well as yours."

"The secret is not in the soil," John replied, with a twinkle in his eye, "but on it. Do you see those grunTERS there? My pork brings me fifty cents a pound—eight in flesh, and the balance in fruit. I began to pasture my orchard ten years ago with hogs, and since that time I have had no trouble with wormy fruit. Apples, as a general thing, don't fall from the tree unless something is the matter with them. The apple-worm and curculio lay their eggs in the fruit, and the apples drop early. The pigs devour the apples, and by September every unsound apple is gone and I have nothing but fair fruit left. The crop of insects for the next year is destroyed by the pigs. They root around under the trees, keep the soil loose, manure the land some, and work over what manure I spread. The apples help the pigs, and the pigs help the apples."

I saw John's secret at once, and have profited by it. I never had so few insects as this spring, and I have given the pigs credit for it. In turning the orchard into a pasture, put in pigs—not landpikes, with snouts like levers. You might lose trees as well as insects in that case. But well bred animals, with judicious snouts, will root in a subdued and Christian-like manner.—*American Agriculturist*.



## CULTURE OF LETTUCE.

EVERYBODY, we believe, likes lettuce. It is considered healthful, has a slight narcotic influence on the system, and, perhaps, may be especially useful to such nervous temperaments as find it difficult to secure a *nap after dinner*.

It thrives best in a light, rich soil; a soil that is rich from prior cultivation, rather than from the immediate application of manure. If it be wanted quite early—and that seems desirable—the seeds must be sown in a hot-bed in March, and transplanted in April, in a spot favorably protected from cold winds; and even here it may need occasional covering. It only requires proper cultivation after this to secure a crop. Allow sufficient room between the plants for them to head out without crowding each other, and an occasional evening watering if the weather be dry. Those who keep poultry, will find it worth cultivation for their use. They are excessively fond of it. A dozen hens will eat two large heads each day, if they can get them. The store pigs like it equally as well. We have been in the habit of growing it along the sides of the paths in the vegetable garden, and on any little vacant spots, where it appears well and gives us a cart load or two each summer for the pigs and the hens.

There are many varieties of lettuce, among which four excellent kinds are the Early White Butter or Cabbage, the Early Curled Silisia, Early Tennis Ball, or Rose, and the Imperial Head, or Sugar Loaf.—*Ex.*

## CULTURE OF CABBAGE.

ELEVEN thousand heads of cabbage may be raised from an acre. This, sold at five cents, will bring five hundred dollars. It is said by those who have raised cabbage extensively, that it is one of the best crops to feed to stock—young stock and cows in particular. There is no doubt of it. Cows are fond of it, and give largely of milk. Some object to its acrid taste and pungent flavor, as this is perceptible in the milk. But the objection is obviated in the case of young stock, and cows out of milk.

To raise cabbage, the richest of ground is necessary. We have known cabbage raised for a dozen years in succession on the same spot, and each crop a good one, varying, of course, with the season. But the soil was of the best kind, so that but little manure was needed. But the soil if still better, would have raised better cabbage. Planted in a hog-yard, or where manure has long lain, gives the best of crops—better than any we have ever seen. It is almost impossible to get your ground too rich for cabbage; and it wants depth, as its long roots penetrate.

Cabbage, like berries, and all water-loving plants,

dries the soil rapidly, and hence gives it a harsh sterile appearance, unless very rich and mellow. Irrigation cannot be too largely indulged in with cabbage. A thorough cultivation of the soil, deep tillage, will aid in this respect.—*Valley Farmer.*

Let the land be rich, with a little superphosphate under each plant, then keep the ground mellow by the frequent use of the hoe, and the cabbages will grow to perfection.

## MANURING NEWLY SET TREES.

WE this spring saw a neighbor finishing off the planting of a row of handsome maples in front of his dwelling, and complimented him on his taste and public spirit, and expressed the hope that his trees would live and flourish. "They *ought to grow*," said he, "for I have put a half wheel-barrow load of hog manure into each hole." "Have you?" we responded, "then the trees will die, and you may as well pull them up now and throw them on the brush heap." But he could not be convinced of his error. "Hog dung done well on the corn-field, and with the hops and tobacco; and why won't it with shade trees?" And so he left his handsome maples, with their roots enveloped in the powerful manure, and the result was as might have been expected. A few leaves put forth in May, but in June they turned yellow and dropped off one by one, and to-day the trees are dead. The lesson is a plain one; keep away manure from newly planted trees. Give the roots finely pulverized surface soil, as good as can be found, and the trees will doubtless thrive. If the soil needs bettering afterward, apply manure to the surface in the fall, and work it in the next spring, its effects will soon be visible.—*Md. Farmer.*

## SURE REMEDY FOR ONION MAGGOT.

M. LUDLOW WHITLOCK, of Great Barrington, Mass., says in the *Country Gentleman*: "For two seasons past I have practiced an accidentally discovered expedient, with perfect success. When the plant *begins* to form the bulb, after first weeding, I draw the earth from it as much as possible, so that the plant will lie down, leaving the small roots below the bulb unharmed; they support the plant, and in a day or two it is erect again, and the *bulb* growing on the *top* of the soil. My opinion, the result of experience, is that the sun is the antagonist of the maggot. I have tried lime, lime and soot, ashes, &c., without success."

TO RAISE MELONS.—Take a barrel with both heads out, set it up on the surface of the ground and fill in as much manure as you please—it will do no harm to fill it full; then raise a mound of earth around it, and plant the seed on the sides of the mound. If too much rain falls, cover the barrel, but in dry weather turn water into the barrel, and it will soak out among the roots without baking the surface. A little old hay or straw should be placed in the top of the barrel.—*N. E. Farmer.*



## Miscellaneous.

### A GENTLE REPROOF.

ONE day, as Zachariah Hodgson was going to his daily avocations after breakfast, he purchased a fine large codfish, and sent it home, with directions to his wife to have it cooked for dinner. As no particular mode of cooking it was prescribed, the good woman well knew that whether she boiled it or made it into chowder, her husband would scold her when he came home. But she resolved to please him once, if possible, and therefore cooked portions of it in several different ways. She also, with some little difficulty, procured an amphibious animal from a brook back of the house, and plumped it into the pot. In due time her husband came home; some covered dishes were placed on the table, and, with a frowning, fault-finding look, the moody man commenced the conversation:

"Well, wife, did you get the fish I bought?"

"Yes, my dear."

"I should like to know how you have cooked it. I will bet anything that you have spoiled it for my eating. (Taking off the cover.) I thought so. What in creation possessed you to fry it? I would as lief eat a boiled frog."

"Why, my dear, I thought you loved it best fried."

"You didn't any such thing. You knew better—I never loved fried fish—why didn't you boil it?"

"my dear, the last time we had fresh fish, you know I boiled it, and you said you liked it best fried. But I have boiled some also."

So saying, she lifted a cover, and lo! the shoulders of a cod, nicely boiled, were neatly deposited in a dish, a sight which would have made an epicure rejoice, but which only added to the ill-nature of her husband.

"A pretty dish this!" exclaimed he. Boiled fish! Chips and porridge! If you had not been one of the most stupid of woman kind, you would have made it into a chowder."

His patient wife, with a smile, immediately placed a tureen before him containing an excellent chowder.

"My dear," said she, "I was resolved to please you. There is your favorite dish."

"Favorite dish, indeed," grumbled the discomfited husband. "I dare say it is an unpalatable, wishy-washy mess. I would rather have a boiled frog than the whole of it."

This was a common expression of his, and had been anticipated by his wife, who, as soon as the preference was expressed uncovered a large dish near her husband, and there was a large BULL-FROG, of portentous dimensions and pugnacious aspect, stretched out at full length! Zachariah sprang from his chair, not a little frightened at the apparition.

"My dear," said his wife, in a kind, entreating tone, "I hope you will at length be able to make a dinner."

Zachariah could not stand this. His surly mood was finally overcome, and he burst into a hearty laugh. He acknowledged that his wife was right, and that he was wrong; and declared that she should never have

occasion to read him such another lesson, and he was as good as his word.

**GREATNESS IN EMBRYO.**—They have a very loyal young gentleman in Germantown, who is reading law, and who will doubtless astonish the natives when he comes to the bar. The following is one of his *flights* of oratory. In a debate, some time ago, some position had been taken and defended, and our friend thought the sentiments atrocious. "Why, Mr. President," said he very solemnly, "the man who would utter such sentiments, would pluck the *goose-quills* from an angel's wing in her airy flight toward heaven!"

A SCHOOLMASTER tells the following good one: I was teaching in a quiet country village. The second morning of my session I found leisure to note my surroundings, and among the scanty furniture I espied a three-legged stool. "Is that the dunce block?" I asked a little girl of five. The dark eyes sparkled, the curls nodded assent, and the lips rippled out, "I guess so, the teacher always sits on that." The stool was unoccupied that term.

"My son," said a fond parent to his offspring, after having surveyed the wonders of the London Crystal Palace. "My son, if you can tell me which of all these works of men pleased you the most, I will give you half a crown." "The veal and ham pies," responded young hopeful; "give me the money."

MEN, in respect to ceremonies, modes and laws, like a flock of sheep, will, in a body, if the bell-wether can only be got to leap over a pole, continue to leap carefully over the same place when the pole has been taken away.

THE EMPEROR of China, instead of paying the doctor as we do when we are unwell, the instant he is taken ill stops the pay of his physicians, and does not renew it until he is quite well again.

MANUFACTURE OF HORSES.—We are glad to learn that the silly enterprise of manufacturing colts out of horse chestnuts has been abandoned.

WHY are the ladies the biggest thieves in existence? Because they *steal* their petticoats, *bone* their stays, *crib* their babies, and *hook* their dresses.

A MAN on being told that a certain kind of stove would "save half the coal," said "I'll take two of them and save it all."

NOT SATISFIED.—The East Indies boast of a nutmeg weighing four ounces, and not satisfied is now asking for "a grater."

A LAMB giving way to its feelings in a plaintive cry would be a good subject for a *bas-relief*.

A LONDON journal calls "Idyls of the Hearth" a *grate* subject.

You are responsible for only one tongue, even if you are a married man.



## Ladies' Department.

### FASHIONS.

THE variety of material and manner of making up of dresses, bonnets and cloaks is so great that it is almost impossible to say that anything is the fashion. Dresses are made with round waists for belts, which are very broad, with long points, and with all kinds of fanciful appendages in the shape of sashes, half basques, coatees, &c. Small sacques of silk and velvet, made rounding in the front, and just long enough to come to the bottom of the waist, are very stylish. The *Bon Ton* has several illustrations of this sacque, worn with full white under-waists and broad belts. The waists of dresses are very short.

Skirts are worn as long and full as ever and not much trimmed, if the material is rich. Flat trimming and very narrow flutings put on in various styles, anything but straight, and heavy cable cord with buttons and tassels are the latest styles.

As to material, the variety is so great that it is hopeless to attempt to designate any one or two styles. Alapaca is as much worn as ever. White and black still retain the first place in all materials. High colors are only worn in the house and for carriage dress. If it were not for the brilliant colors of the Paisley shawls and the cashmeres the spring costumes would be rather sombre.

The bonnets are very small. A slight improvement has been made in the shape by bringing the sides a little further out, so that the ears are not quite so much exposed. Otherwise the shapes are very much as they have been all winter. Drooping crowns or none at all—lace, flowers and loops of ribbon arranged over the waterfall supplying the place of crown and cape. Small as the bonnets are, they still give an elegance to the simplest dress or detract from the beauty of an elaborate one as much as they ever have done, when their dimensions were more imposing. All the materials used by milliners are so immensely high that the prices of bonnets are fast becoming fabulous, and only suited to the purses of oil-men or army contractors. Forty dollars has been considered this winter as a very reasonable price for a bonnet, and the spring styles are as yet but little less. Economy is now the duty of every loyal woman, and there is nothing in a lady's dress in which it can be better practiced than in bonnets. Simple materials, well put together, will always look lady-like, and the great expense is now in flowers and lace.

In cloaks, sacques and circle, trimmed in every style imaginable, still compete for the ascendancy. The sacques, as a general thing, fit quite closely to the figure, and are short. The circles are full with hoods or trimmed with guimp or cord.

Hair dressing, which has become quite as important for street dress as for the house, is really a fine art. *Godey's Lady's Book* for March says:

"The waved bow and waterfall are the newest and prettiest for ordinary coiffure. A bunch of six curls

is worn at the side of the waterfall, or over the centre of the bow. The coronet plait, so very fashionable a few years since, is again coming into favor. Crimped or waved hair is universally worn, and the more frizzy it is the better it is liked. In order to obtain this, crimp, the hair is wet and plaited in small plaits over night; this will give a very good crimp. The most approved method, however, is this: Take a small strand of hair, wet it and pass it through the centre of a long hair-pin, then round one prong, through the centre, and then over the other prong of the pin. Continue to pass back and forth round the prongs until the pin is covered. If it is desirable to crimp the hair at short notice, arrange it as we have described, then cover the hair with a paper and pinch it with a pair of hot tongs. We much prefer the crimping boxes, as they produce a very even, smooth crimp, but they do not generally please, as they do not crimp as near the parting as the other methods. In all cases it is only necessary to take the upper hair for crimping. Fancy pins and arrows of all descriptions are worn in the hair, and some very pretty ones, formed of crochet work and jet, have appeared for mourning."

These styles can all be arranged in false hair, so as to be pinned on in a few minutes, and so save the trouble and expense of a hair-dresser.

Linen collars are worn as much as ever plain, embroidered in the corner or trimmed with narrow lace. Butterflies embroidered in white and in colors are now on everything. As the sleeves to the dresses are still made very close, the under-sleeves are not full, but have deep tight-fitting cuffs.

**CALIFORNIA BEANS—SPANISH MODE OF COOKING.**—"Try some of the beans—my wife's mode of preparing them beats all the Yankee cooks in this region," said Mr. Godey, as we had the occasion to dine with him. The dinner was made up of many dishes, good enough for any connoisseur; but we took a particular relish to the plate of beans, all done to a pulp, rich and fine flavored.

This grain is the principal "staff of life" all over the interior of California, and especially the more southern portion. Here we find old Catholic Missions, Mexican, Spanish and California settlements. The Spanish or California bean is of a roundish, oblong form—some quite deep, others pale red in color. When cooked, they come to the table a little shaded, but sweeter and more delicate to the taste than any of the family of white beans. When cooked in New England style—baked with fat pork—they are very fine.

Mrs. Godey's true Spanish mode of serving them up for table is, firstly, to put them into cold water and boil slowly until done soft, not broken. Then the lard or grease goes into the fry-pan enough for the present mess, and heated sufficiently to fry fritters; dip some beans and liquid from the fat, and mix with the hot grease, and continue to cook over a moderate fire, stirring them often; add to this sliced onions, red and black pepper, and other spices to suit the taste, and you have a delicious plate for the table.—*Country Gentleman.*





## DEATH OF PRESIDENT LINCOLN.

THE Nation weeps. ABRAHAM LINCOLN is dead. At the height of his glory, amid the triumphant shouts of victory, he fell by the hand of an assassin. Words can not express the anguish which racked every heart as the terrible news was conveyed on the wings of the chained lightning on that fearful Saturday morning. Oh! it was a dark, a damning deed. Men unused to tears wept in speechless sorrow. The very earth seemed to stand still, and the heavens were black with horror. Never was man so sincerely and universally mourned. Even the rebels themselves, in whose interest the deed was done, acknowledge that they have slain their best friend. A sterner fate now awaits them, and if they have connived at the act they richly deserve all the woes they have suffered and all that they will suffer in consequence.

It is not for us to pronounce an eulogy on ABRAHAM LINCOLN. In the most trying position that man ever occupied, his honesty of purpose, his kindness of heart, his genuine love of country, and his striking common sense, were manifested more and more as each new occasion for their exercise arose. The difficult problem of a reconstruction of the Union all felt could not be entrusted to better hands, and never had the Nation felt more pride and confidence in its Chief Magistrate than on the day of his death. *All feel that they have lost a friend.*

Let political animosity subside. Let us cease from assailing the motives of those who differ with us. Let this great calamity incline us to the exercise of more forbearance and charity. Let us try to appreciate the blessings of a good Government, and resolve to do all in our power to sustain and perpetuate our free institutions.

## The Season.

So far the season has been highly favorable for the winter wheat and for putting in spring crops. It is at least two weeks earlier than last year. The barley and oats are nearly all in, and farmers are busy preparing to plant potatoes and corn. Let us endeavor to put in all that can be put in well. We shall need all the crops that can be grown, and the probability is that good prices will be obtained for all kinds of farm produce.

## Inquiries and Answers.

WE are always glad to receive inquiries on all subjects of general interest to farmers and horticulturists, and invite our readers to use our columns freely.

## The Markets.

SINCE our last market report great events have happened. Richmond has fallen, and Lee has capitulated. The Confederacy has received its death blow. It can no longer offer any real resistance to the armies of the Union. Guerrilla warfare may be carried on for some time, but even this can not long continue. The war is practically at an end. We may still require large armies to maintain authority in the rebellious States, but we shall see no more great battles.

These events have been so confidently expected that they have produced less effect on the markets than we should have anticipated. Gold is no lower than it was last month—in fact but little lower than it was twelve or fifteen months ago. On the other hand there is a growing ease in the money market. The price of nearly all kinds of farm produce is little lower than a month ago. Wool, potatoes and butter are exceptions. They are very dull and lower. In this city the dealers say they can not get butter to supply the daily wants of their customers. There is an absolute scarcity of butter in this neighborhood; but in New York the papers are chuckling over the fact that those farmers who have held on to their butter have had to take but little more than half what they might have received months ago. Still farmers have no reason to complain. Prices are still good. Prime new butter is worth from 40 to 45c.  $\frac{3}{4}$  lb. in New York, and wool is firm at 60 to 75c. Potatoes bring \$2.50 to \$3.00  $\frac{3}{4}$  barrel. In this city, owing to the difficulty of transportation and the high rates of freight, potatoes are very low. The dealers are paying from \$1.00 to \$1.50  $\frac{3}{4}$  barrel—the latter for peechblows and the former for flukes. They are sold from the wagons to private houses at from 60 to 75c.  $\frac{3}{4}$  bushel. It is thought that as soon as the canal opens, and transportation is cheaper, prices will advance. It appears certain, however, that there is a large crop of potatoes in the Eastern and Middle States. Should a market be found in the South, prices will advance.

Seed barley in this section brings \$1.50  $\frac{3}{4}$  bushel. Seed oats, 75 to 80c. Canada peas, \$1.75 to \$2.00. Flax seed, \$2.50 to \$3.00. Hay, \$15.00 to \$22.00  $\frac{3}{4}$  tun. Corn, \$1.25  $\frac{3}{4}$  bushel. Mill-feed, \$35.00  $\frac{3}{4}$  tun.

In regard to the future wool market it is almost useless to speculate. It seems certain that there is an unusually large quantity in the hands of farmers and dealers, while the clip of this season will be at least as heavy as last year. It is not probable that in the existing state of things at the South we shall have cheap cotton for some years, and while the demand for woolen materials for the army will not be as great as for the last two or three years, there will be none the fewer men to clothe. It is possible, therefore, that the present price of wool may be maintained. Of course, as usual, there will be an effort at the opening of the season, to keep down prices, and the fact that the dealers have lost heavily on last year's purchases will check speculation. If, however, farmers are determined to hold on to their wool, they will in the end obtain fair prices.

The cattle market is still scantily supplied with good



beef, and prices are well sustained. There can be no doubt that there is a real scarcity of beef cattle in the country, but as veal becomes more plenty, and as sheep after shearing will be sold more freely, prices are not likely to advance materially.

Horses and working oxen are higher than at any time since the war. In this section it is difficult to get an ordinary farm horse for less than \$200, while working oxen bring from \$200 to \$250.

### New Advertisements.

Among the advertising notices in the *Farmer* this month that of Mr. Knox, of Pittsburg, Pa., will attract attention. Mr. K. is justly celebrated for his success in the cultivation of strawberries. He is believed to be the largest grower in the United States. He purchased Mr. Judd's entire stock of the Agriculturist. He and Mr. Carpenter, of New York, are the only parties who have them in any quantity. Mr. C. secured his at the same time that Mr. Judd obtained his. Mr. Knox also advertises raspberries, grapes, currants, &c. Send for one of his circulars containing a description of his method of cultivating the strawberry, &c.

H. E. Moring, of New York, is the sole agent for Rhodes' Superphosphate in this State and New England. For turnips, *to be drilled with the seed*, we know of no superphosphate equal to this. We have used it for some years.

Bruce's Concentrated Manure is, to us, a new candidate for favor. It is highly spoken of by those who have used it. Messrs. Griffing Brother & Co., of New York, the well-known and reliable agricultural implement dealers and manufacturers, are the sole agents for the United States.

Jonas W. Yeo, of Richmond, Ind., offers to send a description of his Machines for Sawing Wood in the log, &c.

E. Nicholson, of Cleveland, Ohio, will send an illustrated circular with description of his Self-Operating Carriage Gate.

Among the machines advertised in the *Farmer* this month just now of special interest, are the Cayuga Chief Mower and Reaper, manufactured by Messrs. Barber, Sheldon & Co., of Auburn, N. Y.; the Corn and Bean Planter, manufactured at Brockport, N. Y., by Messrs. Whiteside, Barnett & Co.; and the "Clipper One Horse Mower," manufactured by R. H. Allen & Co., of New York. Among all the Mowing Machines exhibited at the State Fair in this city last fall none appeared to us to combine so many advantages as the one made by the Messrs. Allen.

Those of our readers who wish good Squashes and Mammoth Cabbages will not overlook the advertisements of James J. H. Gregory, of Marblehead, Mass.

The prospectus of the Urbana Wine Company, of Hammondsport, N. Y., will be found in this number of the *Farmer*. There is no section of the State where the grape flourishes so well as at Hammondsport. The Catawba is grown there in great perfection, while with us it can be ripened only on rare occasions and in the most favorable locations.

The "Sheep Wash Tobacco," advertised by James F. Levin, agent of the "South Down Co., of Boston, is said to be an excellent article for killing ticks and curing scab, &c.

### Ready Roofing.

THE American Roofing Company have sent us a sample of their roofing material, which can be seen at our office. It seems as though it would be very durable. Sample yards will be sent by express to those wishing to examine it by writing to the agent of the company, Henry Smith, 94 Wall street, New York.

### The Buckeye Horse Hoe.

WE would call attention to the advertisement of Mr. H. B. Hammon, of Bristolville, Ohio. His horse hoe has several new features which strike us as decided improvements. Send for one of his descriptive circulars.

## ADVERTISEMENTS.

A FEW short advertisements of interest to farmers—and only such—will be inserted in the GENESEE FARMER at twenty-five cents a line, or \$2.50 per square, or \$25 per column, each insertion, payable in advance.

## BRUCE'S PATENT CONCENTRATED MANURE,

MANUFACTURED FROM

## Animal Fibre, Blood and Pure Bone.

Sold by our Agents,

JOHN M. RICHARDS, 111 Commercial street,  
Boston, Mass.  
MICHENER & YOUNG, 206 Market street,  
Philadelphia, Pa.

### Send for Agricultural Almanac.

GRIFFING BROTHER & CO.,  
58 and 60 Courtlandt street, New York,  
Sole Agents for the United States.

my2t

## TURNIP CULTURE.

## Rhodes' the Standard Superphosphate, CANNOT BE EXCELLED

## FOR THIS IMPORTANT CROP.

B. M. RHODES, & CO., 82 South street, Baltimore.  
H. E. MORING, General Agent New York and New England,  
my3t 113 Water street, New York.

## SAWING MACHINES.

WE are building a GREATLY IMPROVED CROSS-CUT SAWING MACHINE for cutting logs into stove wood, with two or four horse powers to drive them.

Also, a new style CIRCULAR SAW for cutting cord wood into stove wood.

Circulars describing our machinery sent promptly on application by letter. Write to JONAS W. YEO,  
my4t Proprietor Robinson Machine Works, Richmond, Ind.

## THE TRUE CAPE COD CRANBERRY

FOR Spring Planting, for Upland and Garden Culture, and for Swamps. Under my method of cultivation the yield last season on upland was over 400 bushels per acre. Explicit directions for cultivation, with prices of plants, with Nursery and Seed Catalogue complete, will be sent to any address. Agents wanted. Seeds prepaid by mail. B. M. WATSON,  
ap2t Old Colony Nurseries, Plymouth, Mass.

## NORTH-WESTERN SANITARY FAIR.

MANUFACTURERS of Washing Machines, Clothes Wringers, Clothes Dryers, or any article used as an aid to washing, are called upon to make a donation of samples of their goods to be sold for the benefit of the Fair, May 30th next.

For information address HARRY DUVALL, Chairman of Committee on Washing Machinery, P. O. Drawer 634S, Chicago, Ill. The donor will have the opportunity of having his machine exhibited by his chosen operator.

NICHOLSON'S PATENT SELF-OPERATING CARRIAGE GATE is superior to any thing that has ever come before the public. Send for an Illustrated Circular, with prices, testimonials, &c. Rights for sale. Address  
my1t E. NICHOLSON, Box 1899, Cleveland, Ohio.

SILVER'S NEW POULTRY BOOK—Just published. Beautifully illustrated with seventy engravings. Tells how to have fresh eggs every week in the year. The best work of the kind published. Sent post-paid for fifty cents. AGENTS WANTED. Address  
my L. B. SILVER, Salem, Ohio.

A WELL PAYING BUSINESS in their own townships, and free from risk, is offered by the Auburn Publishing Co. to 1000 Book Agents. Please send for a circular, &c., to E. G. STORKE, Auburn, N. Y., without delay.  
ap2t

## TILE MACHINE.

THE BEST MACHINE IN AMERICA. Send for a Circular containing description. A. LA. TOURETTE,  
ap65tf Waterloo, N. Y.

\$2 MADE FROM 20 CENTS!—Call and examine, or ten samples sent free by mail for 20 cents. Retail for \$2 by R. L. WOLCOTT, 170 Chatham Square, N. Y. my'64-1y



## GROVER & BAKER'S HIGHEST PREMIUM



ELASTIC STITCH

AND

LOCK STITCH

## SEWING MACHINES,

feb 495 Broadway, New York. tf

## NEW ILLUSTRATED CATALOGUE.

## ROCHESTER CENTRAL NURSERIES.

SEND FOR A CATALOGUE

AND

SPECIAL TERMS OF SALE,

AND

ORDER YOUR TREES DIRECT.

Address C. W. SEELYE,  
apth Rochester Central Nurseries, Rochester, N. Y.

### MARBLEHEAD MAMMOTH CABBAGE.

MY CABBAGE IS THE LARGEST IN THE WORLD. In favorable locations it will grow to weigh from thirty to sixty pounds a head! and wherever introduced they leave all other varieties far in the background. They have been raised in every loyal State weighing from 20 to 60 pounds each. They are not only of an enormous size, but when mature are very hard-headed and remarkably sweet and tender. The calls for seed have been so extensive that for the past two years I have been unable to supply it. I can this season supply packages containing seed sufficient for 500 plants, with full directions for cultivation, sent by mail, prepaid, at 25 cents each; five for \$1.00: one hundred for \$15.00. Also, CANNON BALL CABBAGE—an early sort, making the roundest and *hardest* head of any cabbage grown. Per package, 25 cents; five for \$1.00. STONE MASON CABBAGE. This is a very large drumhead, remarkably reliable for heading. ½ oz., 25 cents; 1 oz., 50 cents; 1 lb., \$4.25; sent by mail post-paid by me.

mh3t JAMES J. H. GREGORY, Marblehead, Mass.

### GREGORY'S SEED CATALOGUE.

MY CATALOGUE OF GARDEN SEEDS, embracing over 200 varieties, (a large portion of them of my own raising,) containing some new and rare vegetables not to be found in other catalogues, is now ready for distribution. Sent free to all applicants. Those who purchased seed of me last season will receive it without writing for it. As the original introducer of the Hubbard Squash, Marblehead Cabbage, and many other new vegetables, I invite the patronage of the public.

mh3t JAMES J. H. GREGORY, Marblehead, Mass.

**WHITTEMORE'S CURE FOR FOOT ROT IN SHEEP** is a positive and speedy cure. Has been thoroughly tested, and never known to fail when applied correctly.

Sold by all Druggists.

Persons wishing to test a bottle can have it sent to any part of the country by express by enclosing 75 cents to the sole proprietor, F. W. WHITTEMORE, Chatham Four Corners, Columbia county, N. Y., to whom all orders should be addressed. A liberal discount made to wholesale buyers.

jan6t

## BAUGH'S RAW BONE SUPER-PHOSPHATE OF LIME.

BAUGH & SONS,

MANUFACTURERS AND PROPRIETORS,

Store No. 20 South Delaware Avenue,  
PHILADELPHIA.

To the farmers of Pennsylvania, New Jersey, Delaware and Maryland, **Baugh's Raw Bone Phosphate** is not a new name. Its great efficiency as a Fertilizer, for all crops, has been for years past practically denoted by them in its *continued* use. We want no better assurance of the high appreciation in which it is held by Agriculturists than the fact of so constant an increase in the demand, from year to year, as our article has enjoyed, and it has been our main object to render it, in every respect, worthy of such a favorable estimation.

In order to give greater facility in the application of the **Raw Bone Phosphate**, we have, since the last season, succeeded in making it so fine and uniform as to be capable of drilling. Farmers will find this an important advantage.

The facilities for the manufacture of the **Raw Bone Phosphate** are now very complete, and we can fill large orders with promptness; but it is desirable that all orders should be sent in as early in the season as possible.

It is packed in bags and barrels, and may be had of any regular dealer in Fertilizers, (to whom we advise all farmers to apply,) or of the sole manufacturers,

BAUGH & SONS,

No. 20 SOUTH DELAWARE AVENUE,

PHILADELPHIA.

The highest market price paid for Bones. mh3t

## SUPERPHOSPHATE OF LIME, BONE DUST AND MEAT AND BONE COMPOST.

MANUFACTURED BY

TASKER & CLARK,

Cor. 8th and Washington Sts., Philadelphia.

THE manufacturers offer their Superphosphate to the public confident that it will be found equal to any similar article now in the market. Being made from finely ground bones (not burned), Peruvian guano, and other ingredients having manurial properties, it has been found a superior fertilizer for wheat, grass, &c., &c. Price \$65.00 per tun at the factory.

MEAT AND BONE COMPOST.—A valuable manure from refuse meat, bones and other offal from the slaughter-house. Price \$40 per tun.

BONE DUST—Very fine and pure at \$65.00 per tun.

Terms Cash. Address as above,  
feb7t TASKER & CLARK, Philadelphia, Pa.

### TO FARMERS!

BRADLEY'S TOBACCO FERTILIZER, AND BRADLEY'S X L Superphosphate of Lime, are for sale at wholesale and retail by the Manufacturer. WM. L. BRADLEY:

Sales Office 24 Broad street, Boston.

Pamphlets containing testimonials in favor of his Tobacco Fertilizer, Bradley's X L Manual on the Culture and Curing of Tobacco, with Illustrations, can be had by addressing the undersigned.

WM. L. BRADLEY.

Highest Cash prices paid for Bones. my

## BEECHER'S PATENT VENEER FRUIT BASKET.

AFTER one season's thorough trial of the VENEER FRUIT BASKET, we offer it to the trade with the full assurance that nothing of the basket line now in market can compete with it in its adaptability to the wants of fruit-growers. For durability and style our Basket has no superior, and for strength and cheapness no equal.

For circulars of description, &c., address

feb6t A. BEECHER & SONS, Westville, Conn.

## THE BEST AND CHEAPEST FARMING LANDS IN THE WHOLE WEST, ARE THOSE OF NORTHERN MISSOURI.

REBELS are moving away, and are selling for whatever they can get. An extensive immigration from the Northern States and from Europe already begun, will soon occupy that part of the State and develop its immense natural wealth. Free and full information given on application to

nov'64-ly ELI THAYER, 1 Park Place, New York.



## Sheep Wash Tobacco

I hereby certify, that I have been familiar with all the processes employed by the South Down Company in the manufacture of their "Sheep Wash Tobacco," and that the article prepared under Mr. Jaques' Patent contains all the useful principles of the Tobacco in a concentrated form.

This Paste, employed as a Sheep Wash, according to the directions furnished by the Company, has the effect of curing Scab and other cutaneous diseases, and destroying all parasitic insects which infest the skin and wool of the Sheep, and thereby improves the health of the animal, as well as the quality of its fleece. Employed in the same way, the solution being made stronger, it will destroy those insects which infest the skins of larger animals, and also those that are injurious to vegetation.

CHARLES T. JACKSON, M. D.,

*Assayer to the State of Massachusetts, and  
Consulting Chemist.*

Wool Growers should beware of any preparation that contains "sulphur," as it is sure to destroy the fibre of the wool. One pound of *Extract Tobacco* will make twelve gallons Wash, and contains the strength of eight pounds of Tobacco, as prepared by farmers.

**Agents wanted in every Wool District.**

JAMES F. LEVIN, *Agent South Down Co.,*  
23 Central Wharf, Boston.

\*.\* Farmers, preserve this advertisement, and ask your storekeepers to keep the Wash for sale. A liberal discount to the retailers. feb9t

## "Cayuga Chief Mower and Reaper,"

WITH

**"YOUNG'S IMPROVEMENTS,"**  
FOR 1865.

Manufactured only by:

**BARBER, SHELDON & CO.,**  
Auburn, N. Y.

Examine closely before buying, as there are others building the Cayuga Chief without "YOUNG'S IMPROVEMENTS."

Send for Descriptive Pamphlet.

ap4t

BARBER, SHELDON & CO., Auburn, N. Y.

**THE PICTORIAL PHRENOLOGICAL JOURNAL** for JANUARY, FEBRUARY and MARCH, have 32 quarto octavo pages each, and beautiful illustrated Covers. They contain Portraits of Tennyson, Silliman, Sheridan, Cobb, Phillips, Susanna Wesley—Mother of John—an Indian Chief, Franz Muller, Miss Muggins, Miss Fury, the Princess of Wales, Florence Nightingale, A Group of Warriors—Hannibal, Julius Caesar, Pizarro, Cromwell, Charles XII, Frederick the Great, Scott, Wellington and Napoleon. The Great Surgeons of the World—Harvey, Abernethy, Jenner, Hunter, Cooper, Mott and Carnochan. Also, W. S. Lander, Mrs. Farnham, Mr. Clark, Mr. Kilbourn, Mr. Morrill, etc. Prof. Owen on the Brain; The Human Face; Pre-existence; with Ethnology, Prenology, Physiology, Physiognomy, and Psychology. Gov. Fenton; Edward Everett, the Orator; Aristotle, the Philosopher; Major Davidson, the Patriot; Charles Fourier, W. H. Fry; The Races of Men; Caucasians, Mongolians, Ethiopians, American Indians, Malays, with Grouped Portraits of each, and a Map showing the Geographical distribution of the Races; How the Brain changes the Cranium; The Inscrutable; Foreseeing, and Seeing at Sea, etc.—All Double Numbers, with numerous Illustrations, sent by first post for 60 cents, or \$2 a year. Address Messrs. FOWLER & WELLS, 389 Broadway, New York. ap2t

**THE CLIPPER ONE-HORSE MOWER**—Adapted to every variety of surface and to cutting every kind of grass.

This machine is capable of cutting three-fourths to one acre of the heaviest grass per hour, and can be drawn as easily by one horse as ordinary two-horse mowers by two horses.

The height of cut can be varied by the driver while the machine is in motion, and without leaving his seat. It is simple, durable, and not likely to get out of order.

Two-Horse Mowers and Combined Machines of the same pattern. R. H. ALLEN & CO.,

ap3t

189 and 191 Water street, New York.

## Corn and Bean Planter Combined.

WE are manufacturing one of the most successful Two-Rowed Planters now in use. One man and horse can plant either in rows or checks from 10 to 12 acres per day, and do the work well. The machine is easily managed, and is of light draft for one horse. It is one of the greatest labor-saving machines of modern invention. Patented August 14th, 1860.

The demand for this Planter has continued to increase, until scores of them are now in use in Western New York, Michigan and Canada West.

Cash price at the Factory, \$25.00, subject to alteration as stock and labor may require.

Please order early. Several orders came too late last year to be filled.

Orders with cash will receive prompt attention. A liberal discount made to merchants and agents.

For further description, send for circular.

ap WHITESIDE, BARNETT & CO., Brockport, N. Y.

## American Roofing Company.

### GREEN'S PATENT.

THIS COMPANY is now prepared to furnish one of the best articles of ROOFING ever introduced, consisting of a STOUT MATERIAL made WATER-PROOF by a COMPOUND of INDIA RUBBER, hardened by a coat of METALLIC PAINT, prepared expressly.

The WHOLE FABRIC has been thoroughly tested, is WATER PROOF, and unaffected by changes of weather.

It rolls up and unrolls like a piece of Oil Cloth.

It is designed for covering RAILWAY CARS, STEAMBOATS, DWELLINGS, BARNs and SHEDS. It can be laid down by any sensible working man.

It is cheaper than any known roofing of equal durability.

It can be seen in use and samples had by applying at the Office of the Company, No. 94 WALL STREET, NEW YORK.

ap3t

HENRY SMITH, Agent

## RAKE RODS

FOR THE SPRING TEETH OF THE

### WHEEL HORSE RAKE.

### GALVANIZED PUMP CHAIN & WHEEL RAKES.

**TERRITORIAL RIGHTS** for the "WHITCOMB PATENT" HORSE RAKE, the most popular Wheel Rake out. Thousands are being made and sold per year.

**HYDROMETERS** for testing accurately in a moment the quality of Milk. Sent to any address, postage paid, for fifty cents each. Address E. WHITE,

feb4t

Stamford, Conn.

## HUBBARD—TURBAN—YOKOHAMA

I AM receiving letters daily from all parts of the United States, from farmers, gardeners and others, who pronounce my TURBAN to be the sweetest, finest grained, and most delicious fall squash they ever ate. The HUBBARD is *universally* acknowledged to be the best of all winter squashes, while the new Japan squash, the YOKOHAMA, is pronounced the very best of its class. *I was the original introducer of the Hubbard and Turban Squashes.* Packages of seed, (all of my own raising,) sent by mail, with full directions for cultivation, for 25 cents each for Turban and Yokohama, and 15 cents for Hubbard. Five packages of Turban or Yokohama for \$1.00. Hubbard, by mail, postpaid by me, \$2.62 per pound.

mh8t.

JAMES J. H. GREGORY, Marblehead, Mass.

**SUPERIOR FARM LAND!—20,000 ACRES AT LOW PRICES AND ACCOMMODATING TERMS.**—Franklinville Tract, Gloucester county, New Jersey, 25 miles south of Philadelphia on railroad running from Philadelphia and Camden to Cape May. In lots to suit purchasers. Circulars, with reports of SOLON ROBINSON, Hon. WM. PARRY, and others, with full information, sent free, by addressing JOHN H. COFFIN & CO., Franklinville, Gloucester county, New Jersey. Also, improved Farms from 20 acres upward. ap6t

**"RHODES"**—THE STANDARD MANURE for Tobacco, Corn, Oats, &c.; also, Top-dressing for the growing Wheat. Our spring supply of this long-established Manure ready for delivery. B. M. RHODES & CO.,

Office 82 South street, Bawly's Wharf, Baltimore.

Or, H. E. MORING, General Agent for New York and New England, 113 Water street, near Wall, New York.

## FRESH SEEDS OF ALL KINDS.

BY MAIL, PREPAID; ALSO,

The New Strawberries, Grapes, Currants, &c.

Priced Descriptive List will be sent to any address.

B. M. WATSON, Old Colony Nurseries, Plymouth, Mass. a2t



**DOTY'S CR8 CLOTHES & WOOL WASHERS.**

**DOTY'S PATENT  
CLOTHES AND WOOL WASHERS.**

**Economical, Durable, Simple, Efficient, Con-  
venient, and Easily Operated  
WASHING MACHINES!**

The FIRST and ONLY ONES out of more than one thousand patented that have proved

**UNIVERSALLY SUCCESSFUL!**

They save full two-thirds the Labor, Time and fatigue of hand-washing, take less Soap,

**Save \$20 to \$100 a year**

in Wear of Clothing, and will last many years.

THESE WASHERS WERE EXHIBITED AT THE GREAT NEW ENGLAND FAIR OF 1864, WON THE ADMIRATION OF THOUSANDS, AND WERE AWARDED A SPLENDID DIPLOMA; ALSO AT THE WISCONSIN AND PENNSYLVANIA STATE FAIRS OF 1864, THEY WERE AWARDED THE FIRST PREMIUM.

Wool Fleeces may be washed in these machines at the rate of a FLEECE IN TWO MINUTES, without tearing them apart, and the wool brings the price of RUB-WASHED WOOL, which is FIVE TO EIGHT CENTS PER POUND MORE than that washed on the sheep. This is very important to every wool-grower.

They are recommended as the Very Best in SOLON ROB-INSON'S great new work, "Facts for Farmers," by ORANGE JUDD, proprietor of the American Agriculturist, and by JOSEPH HARRIS, proprietor of the Genesee Farmer.

SEND FOR CIRCULAR.

AGENTS WANTED EVERYWHERE.

**DOTY BROTHERS, Janesville, Wis.**

**DOTY BROTHERS, 151 Nassau St., N. Y.**

**J. B. LAWES'**

ARTIFICIAL

**MANURES.**

FACTORIES, LONDON OFFICE,  
DEPTFORD AND BARKING CREEKS, } No. 1 ADELAIDE PLACE,  
ENGLAND. } LONDON BRIDGE, E. C.

THE undersigned, having been appointed Sole Agent in the United States for the sale of the celebrated and well-tested (through all Europe and the East Indies) Artificial Manures, manufactured by J. B. LAWES, Esq., of Rothamsted, St. Albans, Eng., whose works are the LARGEST and OLDEST of the kind in the world, now takes much pleasure in informing the Public that he is prepared to introduce them in this country in all their different branches, viz., for the production of

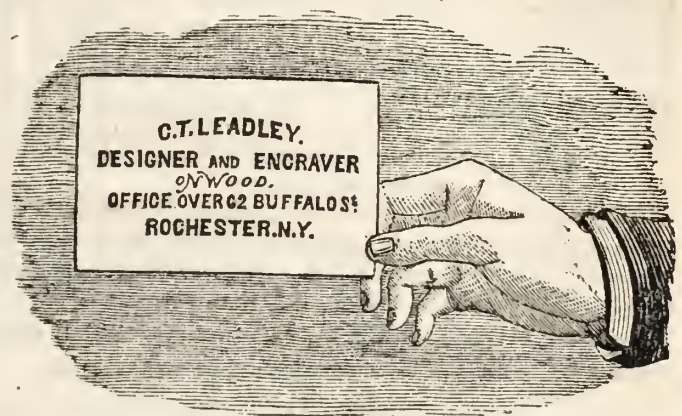
**WHEAT,  
CORN,  
GRASS, and  
VEGETABLES of all kinds.**

Farmers and Agriculturists from all parts of the country will be supplied on the most liberal terms, and all orders and inquiries promptly attended to.

**RUFUS W. LEAVITT, Agent,**

novtf

118 WALL STREET, NEW YORK.



HAVING had considerable experience among some of the first-class Artists and Engravers in New York, I have returned to Rochester and established myself at the GENESEE FARMER OFFICE, No. 62 Buffalo street, third story, where I am prepared to execute all orders for Engraving.

MACHINERY, IMPLEMENTS, CATTLE, HORSES, SHEEP, POULTRY, PIGS, BUILDINGS, PLANTS, FLOWERS, FRUITS, &c., promptly executed in the highest style of the art, and cheaper than any other establishment in Rochester. ORDERS BY MAIL PROMPTLY ATTENDED TO.

STEREOTYPES AND ELECTROTYPES furnished at the lowest rates. Address

C. T. LEADLEY,  
Box 900, Rochester, N. Y.

**Babbittonian Penmanship.**

THIS SCIENTIFIC and SELF-TEACHING system, which is being ordered by the thousand and sent to every part of the Union, consists of nearly one hundred copies on self-explaining card-board copy slips, and will guide the learner to an elegant command of the pen without schools or teachers. Terms, post-paid to all parts of the Union, \$1.50. Terms to Teachers and Clergymen, \$1.

"The Babbittonian system of Penmanship is splendid."—J. H. Myers, *Spencerian Penman*.

"It is chaste and beautiful."—*New York Evangelist*.

"The most scientific and beautiful of systems. An editor of a religious journal has called it magnificent, and worth \$5 instead of \$1.50."—*Journal and Messenger*.

"Babbittonian Penmanship is far in advance of all other systems. 1st. It is more scientific. 2d. It gives a more complete elementary discipline. 3d. It is more beautiful. 4th. It is more practical."—R. M. Boggs, *formerly Spencerian Penman*.

"Admirably adapted to the end in view."—*N. Y. Observer*.

The system is unequalled for use of schools as well as private learners, great reduction being made. *Splendid terms offered to Agents.* A fine

**GOLD MEDAL**

offered to the best Babbittonian Penman, and another for the best improvement from Babbittonian copies.

Send for Circular, or forward money for Penmanship to **BABBITT & WILT**, Principals of *Miami Commercial College*, Dayton, Ohio. dec64f



# PROSPECTUS

OF THE

## URBANA WINE COMPANY.

INCORPORATED UNDER THE GENERAL LAW  
OF NEW YORK.

HAMMONDSPORT, STEUBEN COUNTY, N. Y.

Capital \$250,000.—Shares \$100 Each.

### OFFICERS.

President,.....JOHN W. DAVIS.  
Vice-President,.....CLARK BELL.  
Secretary and Treasurer,.....HENRY H. COOK.  
General Superintendent,.....A. J. SWITZER.

### TRUSTEES.

Major General W. W. AVERELL,.....U. S. Army.  
CLARK BELL,.....13 William street, New York.  
HENRY H. COOK,.....Bath, N. Y.  
JOHN W. DAVIS,.....Hammondsport, N. Y.  
HARLO HAKES,.....Hornellsville, N. Y.  
OSCAR J. AVERELL,.....Bath, N. Y.  
FRANCIS M. BIXBY,.....371 Washington street, N. Y.  
ANDREW J. SWITZER,.....Hammondsport, N. Y.  
Counsel,.....HARLO HAKES.

This Company is formed for the purpose of manufacturing wines and brandies from the grape, and for the production and culture of the best known varieties, at and near Hammondsport, in the county of Steuben, and State of New York.

The Company has purchased the following property, all situated in the very heart of the vine-growing district:

#### No. 1.

Fifteen acres and 25-100, known as the Bell & McMaster Vineyard, which is one of the oldest and most successfully cultivated vineyards in the region. A portion of this vineyard was set in spring of 1857, and has both Isabellas and Catawbias in full bearing.

#### No. 2.

The property known as the A. J. Switzer & Co. Vineyard, containing about thirty-five acres on the shore of the Crooked Lake, on which about twenty-four acres are now set to Isabellas and Catawbias, including one acre of Delawares, set in spring of 1862.

Five acres of this vineyard will be in full bearing the next season, and ten acres more come into bearing then for the first time.

#### No. 3.

The property known as the Pine Point Farm, containing one hundred and sixty-eight acres of the choicest grape land, situate on the shore of the Crooked Lake, on which about twenty acres were set in spring of 1863.

All of this property has been selected with great care, and has been critically examined by competent and scientific men and pronounced of the first quality, and possessing the requisites of soil, exposure and climate essential for successful culture.

On this last named property is about ten acres of land, forming a point, with a steamboat landing and suitable and ample place for the manufactories, vaults and buildings of the Company.

This property is all situated on the hill-side, with a south-eastern exposure, and is contiguous to the lake and immediately on its shores.

The soil is dry and gravelly, resting upon calcareous rock. It requires no under drainage and very little manure.

The climate at this place is remarkably mild and salubrious. Fruits of all kinds have been cultivated here in great perfection,

peaches and apricots ripening in the open air. The vine-growing district is embraced in a narrow strip of land on the slope of the hill-side, along the border of the lake, and the valley above its head, and an experience of over forty years demonstrates the successful culture of the grape here. The temperature is wholly different from that of the country adjacent, by at least ten degrees, and the Catawba and Isabella for many years have ripened perfectly in the open air, without laying down or covering of vines in winter.

The crop in the past has been almost wholly exempt from frost, the contiguity of the lake influencing the temperature; even the well-known frost of June, 1859, which devastated so large a portion of the whole country, not injuring the vineyards near the lake.

### THE CULTURE.

The grape was introduced at this point about forty years ago, by Rev. WILLIAM W. BOSTWICK, and both varieties, Isabella and and Catawba, successfully cultivated by him in the open air.

WILLIAM HASTINGS also for many years continued the culture on the property, a portion of which is now in the hands of this Company. During all this time the crop has never failed, and thus far has been exempt from mildew or insects.

There are already several hundred acres of bearing vineyards in this district, and the crop has become a valuable and prominent part of the production of this region.

*It is proposed by the Company to set from twenty-five to fifty acres of vineyard per annum, until the property is fully developed.*

### WINE AND WINE MAKING.

It is proposed to erect large and commodious cellars on the property the ensuing season, in time for the vintage of next fall.

The success which has attended the manufacture of wine in the United States, is a sufficient recommendation without detail.

Wine manufactured for some years past from grapes grown here has been highly commended, and has already acquired a reputation inferior to none in this country.

The protection furnished by Government to our own manufacture, and the universal public demand for a pure article, both of wine and brandy, give the Company every reason to believe that it will be successful.

### ESTIMATES.

An acre of grapes in a good year will produce three and one half to four tons fruit, but a fair average yield is about two and one-half tons.

The price the past year has ranged from 15 to 25 cents per pound in New York, in the general market.

At 10 cents per pound (which they are worth to the Company for wine purposes) the production of one acre would be say \$500. The Company can develop at least two hundred acres of bearing vineyards on their property, the products of *one half of which* in a single year at that price would be \$50,000, exclusive of the manufacture of wine.

The gentlemen who have consented to take the management of this enterprise are most of them experienced in grape culture. Some of them are pioneers in this location. They are well known, and their names are a sufficient guarantee that the business will be vigorously prosecuted, as well as economically and honorably managed.

No pains will be spared to secure the most intelligent and competent men to carry on the business of the Company, and the manufacture of the best native wines and brandy, after the most approved American and European methods.

About \$150,000 of the Capital Stock has been already subscribed. Books of subscription for the residue of the Capital Stock are now open at the First National Bank of Bath, New York, at par.

The Company will allow subscribers to the remainder of stock, at their option, the privilege of loaning from the Company three-fourths or less of the amount subscribed and paid in, on the security of the notes of subscribers on time, with interest at seven per cent., payable semi-annually, secured by assignment of stock as collateral. Notes if taken, payable in installments of one and two years.



# U. S. 7-30 LOAN.

By authority of the Secretary of the Treasury, the undersigned has assumed the General Subscription Agency for the sale of United States Treasury Notes, bearing seven and three-tenths per cent. interest, per annum, known as the

## SEVEN-THIRTY LOAN.

These Notes are issued under date of June 15th, 1865, and are payable three years from that time, in currency, or are convertible at the option of the holder into

## U. S. 5-20 Six per cent. GOLD-BEARING BONDS.

These bonds are worth a premium which increases the actual profit on the 7-30 loan, and its *exemption from State and municipal taxation adds from one to three per cent. more, according to the rate levied on other property.* The interest is payable in currency semi-annually by coupons attached to each note, which may be cut off and sold to any bank or banker.

The interest amounts to

**One cent per day on a \$50 note.**

**Two cents " " " \$100 "**

**Ten " " " \$500 "**

**20 " " " \$1000 "**

**\$1 " " " \$5000 "**

Notes of all the denominations named will be promptly furnished upon receipt of subscriptions, and the notes forwarded at once. The interest to 15th June next will be paid in advance. This is

## THE ONLY LOAN IN MARKET

now offered by the Government, and it is confidently expected that its superior advantages will make it the

## GREAT POPULAR LOAN OF THE PEOPLE.

Less than \$300,000,000 of the Loan authorized by the last Congress are now on the market. This amount, at the rate at which it is being absorbed, will all be subscribed for within four months, when the notes will undoubtedly command a premium, as has uniformly been the case on closing the subscriptions to other Loans.

In order that citizens of every town and section of the country may be afforded facilities for taking the loan, the National Banks, State Banks, and Private Bankers throughout the country have generally agreed to receive subscriptions at par. Subscribers will select their own agents, in whom they have confidence, and who only are to be responsible for the delivery of the notes for which they receive orders.

JAY COOKE,

SUBSCRIPTION AGENT, Philadelphia.

May 1, 1865.—3t

## BAUGH'S RAW BONE PHOSPHATE.

For all description of crops this article has been found, after years of trial, a most active and permanent Manure. We are gratified to be able to state that the demand for the

### RAW BONE PHOSPHATE

last fall exceeded by many hundreds of tons that of any previous season, which is a substantial proof of its excellence and popularity. We are now in the midst of a very active spring season, and the demand is very pressing from all quarters. Farmers would do well not to delay their orders.

It is packed in bags and barrels, and may be had of any regular dealer in Fertilizers, (to whom we advise all farmers to apply,) or of the sole manufacturers,

**BAUGH & SONS,**

No. 20 SOUTH DELAWARE AVENUE,

PHILADELPHIA.

The highest market price paid for Bones.

The following letter from one of the most successful agriculturists of New Jersey will speak for itself:

“HAMMONTON, N. J., May 23, 1864.

“MESSRS. BAUGH & SONS: Two years ago I wrote a short letter in our County Agricultural paper, giving my experience of two years with your Raw Bone Phosphate, and advising our farmers to give it a trial. Since that time I have given it a more extended application to crops, and the results have more than fulfilled my expectations.

“My farm is a light sandy loam. In its natural state it would not grow anything. Peruvian Guano will stimulate it to bear a good crop, but the second year it will require double the amount of Guano to produce the first year result. Barn-yard manure, glue waste, soap boilers' waste, are nearly exhausted in maturing one crop; but the Raw Bone Phosphate will mature two good crops, and the land will be made more valuable with each year's application.

“By using four hundred pounds of your Phosphate to the acre—one-half broadcast and the other applied in the hill, I have gathered one hundred bushels of ears of fine corn. I have nearly twenty acres of fruits of different kinds, and I now rely wholly upon your Phosphate to keep them in good health. I have two thousand pear trees, two acres of strawberries, two acres of blackberries, and six acres of grape-vines, and they are all in superb condition. If any farmer has better trees and vines than I have, he must have used your Raw Bone Phosphate.

“Applied to root crops the results are equally satisfactory. For turnips, cabbage, mangolds, tomatoes, it is every way more valuable than any other manure I have ever used; combined with marl it is a most superior manure for potatoes.

“I have tried several other Phosphates, among them some of the most popular in the country, but with very different results.

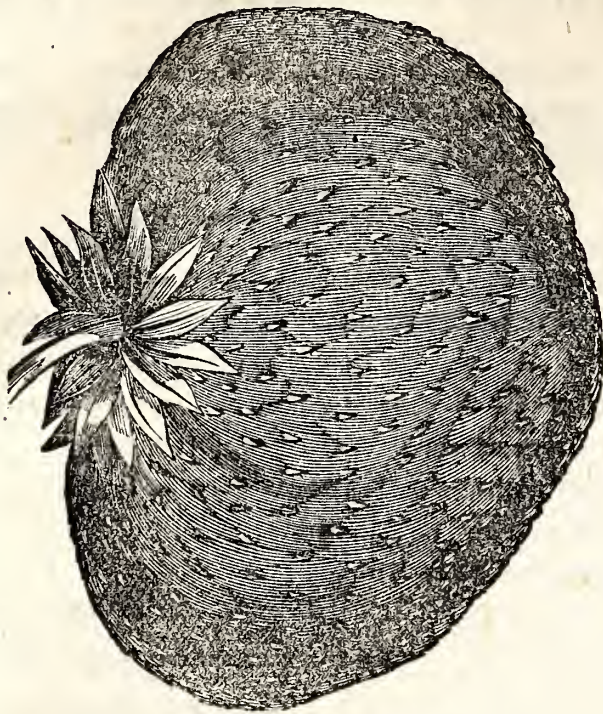
“Market gardeners and fruit-growers should certainly use Baugh's Raw Bone Phosphate. They would soon perceive a marked difference in the QUALITY of their vegetables and fruits over those stimulated with cheap composts of night soil.

“Yours truly.

JOSEPH H. NORTH, M. D.”



KNOX  
FRUIT FARM AND NURSERIES.



GREAT AGRICULTURIST.

It is claimed for this new Seedling, that it is of unequalled size and productiveness, single plants producing as high as 294 berries, many of them weighing over an ounce each; of bright, glossy crimson color, very firm, high flavored, and a first-class market berry. For an account of its origin, introduction by us, character and productiveness of the plant, size and character of the fruit, and other information, see our Circular. We have bought of Mr. Judd his entire stock of plants for sale, and are now able to furnish them at the following prices:

1 plant .....	\$ 75	50 plants .....	\$ 15 00
2 plants .....	1 20	100 plants .....	25 00
6 plants .....	3 00	500 plants .....	125 00
12 plants .....	5 00	1000 plants .....	200 00

Our stock of Strawberry plants this season—including GOLDEN SEEDER, (the best early,) RUSSELL and FILLMORE (both of wonderful size and productiveness,) FRENCH'S SEEDLING, TRIUMPH DE GAND, WILSON'S ALBANY, and all other desirable kinds—is the largest and best we have ever offered.

STRAWBERRY PLANTS BY MAIL.

We will send, safely packed and post-paid,

- For \$1—1 Agriculturist, 8 Golden Seeded.  
For \$2—2 Agriculturist, 10 Golden Seeded, 12 Russell.  
For \$3—3 Agriculturist, 10 Golden Seeded, 12 Russell, 12 Fillmore.  
For \$5—6 Agriculturist, 12 Golden Seeded, 12 Russell, 12 Fillmore, 12 French's Seedling, 6 Kitley's Goliath.  
For \$10—12 Agriculturist, 24 Golden Seeded, 24 Russell, 24 Fillmore, 24 French's Seedling, 12 Kitley's Goliath, 12 Lennings' White.

For description of above and many other kinds—our select lists, mode of culture, price, &c., see our Illustrated Catalogue.

GRAPES.

Our vines are grown in the open air, from the best of bearing wood taken from our own vineyards, and are greatly superior to those grown under glass, with their roots cramped in pots. They are healthy and vigorous, have remarkably good roots, and give entire satisfaction in their growth when planted, which is the true test of a good vine. We offer in large quantity the following:

CONCORD,	DIANA,	ELSINGBURG,
DELAWARE,	UNION VILLAGE,	HERBEMONT,
HARTFORD,	MAXATAWNY,	ALLEN'S HYBRID,
CREVELING,	TAYLOR,	REBECCA,
IONA,	ISRAELLA,	ADIRONDAC.

And all other desirable kinds.

RASPBERRIES.

Our collection is unsurpassed, if equaled anywhere, and includes:

- HORNET, the largest of all, and of great excellence.  
PILATE, very early and valuable.  
IMPERIAL, very productive and fine.  
SOUCHETTE, very beautiful and good.  
JOUET, very beautiful and good.

BRINCKLE'S ORANGE, finest flavor.  
FRANCONIA, one of the very best.  
IMPROVED BLACK CAP, hardy and very profitable.  
PHILADELPHIA, ALLEN'S HARDY, &c.

BLACKBERRIES.

NEW ROCHELLE, DORCHESTER, and NEWMAN, in any quantity.

CURRANTS.

We have taken special pains to collect the best varieties of Currants, and have a very large supply of—

- CHERRY, largest and best for jelly.  
WHITE GRAPE, best white, very fine.  
VICTORIA, productive and latest.  
SHORT BUNCH RED, productive and very good.  
VERSAILLAISE, very large and best quality.

Gooseberries, Asparagus, and Linnæus Rhubarb, &c.

Send for Catalogue, enclosing stamp, at our

Seed Store, Horticultural and Agricultural House,  
No. 29 Fifth Street.

All articles belonging to such an establishment can be had, of the best quality and on the most favorable terms.

J. KNOX, No. 29 Fifth St., Pittsburg, Pa.

New Strawberries.

GREAT AGRICULTURIST.

The Largest Strawberry in the World.

I HAVE A FINE STOCK OF PLANTS OF THIS REMARKABLE variety at the following rates:

2 plants.....	\$ 1 20
6 plants.....	3 00
12 plants.....	5 00
100 plants.....	25 00
1000 plants.....	200 00

I have also several thousand plants of the Great Agriculturist, second size, at the following rates: \$2.00 per dozen; \$10.00 per hundred; \$75.00 per thousand. I shall plant this size.

FRENCH SEEDLING.—The best early Strawberry known. Fruit very large and fine flavored; very productive. \$1.00 per dozen; \$4.00 per hundred.

BUFFALO SEEDLING.—A decided improvement on the Russell. \$1.00 per dozen; \$5.00 per hundred.

RUSSELL'S GREAT PROLIFIC.—I have a fine stock of this splendid variety at 75 cents per dozen, or \$2.00 per hundred. Plants may be safely transported up to the 10th of June.

All orders addressed to  
WM. S. CARPENTER,  
mylt 329 Greenwich street, New York.

THE BUCKEYE HORSE-HOE

MAKES LABOR LIGHT. Enclose stamp for PERPETUAL ALMANAC with cut, price, &c.

HEMAN B. HAMMON, Patentee and Manufacturer,  
ap2t\* Bristolville, Trumbull county, Ohio.

THE GENESEE FARMER:

A MONTHLY JOURNAL OF AGRICULTURE AND HORTICULTURE.

Published at Rochester, N. Y., by

JOSEPH HARRIS.

Terms—INVARIABLY IN ADVANCE—One Dollar a year. In clubs of five and upwards, Eighty Cents each.

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## WALKS AND TALKS ON THE FARM.—NO. 18.

A FRIEND writes me, that "notwithstanding the wet weather, his garden looks well," and he adds that for the future he will always trench his land in the fall. There can be no doubt of the advantage of fall plowing or trenching, if for no other reason than forwarding work in the spring. Had I not plowed so much last fall, it would have been impossible for me to have got in my crops this spring without extra force. As it is, I am pretty forward with my work *for this neighborhood!* We are by no means first-class farmers. On the east side of the river they are generally at least two weeks ahead of us in their work.

But as compared with last spring, what a pleasant season we have had. It gives me a cold shiver to read over my diary, but the sensation is not wholly unpleasant. It is like sitting by a warm fire and looking out on the storm. Just listen to my foreman's record of May, last year:

MAY 1. Sunday. Quite cool, but fine.

2. Warm morning. Plowing pea land and picking stones.
3. Raining all day, with some snow. Three teams at city for brick and plaster.
4. Rain in the morning. Teams at city for lumber and plaster.
5. Warm. Plowing pea land.
6. Warm. Plowing for peas and barley.
7. Raining all night. Plowing barley land, with two teams, and sowing bone-dust, plaster and guano.
8. Sunday. Warm and showery.
9. Warm, with slight showers. Plowing barley and pea land, and sowing plaster and guano and peas. Harrowing peas.
10. Raining all day and very cold. Raising barn.
11. Snowy morning and very cold all day. One team at city. Making fence, &c.
12. Very cold snow. Two teams at city.
13. Cool morning. Began to rain at five P. M. Two teams at city for draining tiles. Sowing peas.

MAY 14. Raining very hard all night and day.

15. Sunday. Cool, but fine.
16. Fine. Two teams at city for tiles.
17. Heavy shower at noon. Three teams at city for tiles.
18. Fine. Sowing and harrowing peas.
19. Fine and warm. Sowing guano and barley. Harrowing barley.
20. Fine. Sowing barley.
21. Fine. Harrowing barley and plowing oat land.
22. Sunday. Very fine.
23. Very warm. Plowing oat land with four teams.
- 24,25,26. Plowing oat land. Digging drains.
27. Sowing oats and harrowing.
28. Rolling oats.
29. Sunday. Warm and moist.
- 30 & 31. Plowing corn land. Digging drains.

There is a record for you! My oats and barley barely in by the first of June. Corn land not plowed, and no potatoes planted.

Now (May 23,) some of my potatoes in the field are up; barley, oats and peas completely cover the ground, and I commenced planting corn yesterday and hope to have thirty acres finished in three or four more days.

I am planting it with one of Whiteside, Barnett & Co.'s Corn and Bean Planters. The Deacon shook his head when I told him that I intended to use a machine for planting. Corn, he said, well put in with a hoe, is equal to half a hoeing. No doubt he is right. But the difficulty is, to get it well put in. I am *sure* that the machine cannot plant it *worse* than my corn was planted by hand last year. At all events, it will plant beans to perfection.

"How about the Potato Planter." Well I have planted my potatoes with it, but how they will come up remains to be seen. I have plenty of cabbage plants, and if there are any vacancies, will fill them with cabbages. But I think the machine will drop the potatoes quite as regularly, as the work is ordinarily performed, and it certainly saves a great deal of labor, and that at a time when farm work is most



pressing. All that you have to do is to plow and harrow the land. No marking is needed, as the machine makes its own marks and can be kept perfectly straight. You have no furrows to make, no potatoes to cut or drop, and no rows to cover. The machine makes the furrow, cuts and drops the potatoes, covers them up and rolls the land. It will plant six acres in a day, or eight if you have everything ready and wish to do as much as possible.

"But how can it cut the potatoes?" Of course the machine cannot see where the eyes are. It cuts the sets a given size without regard to where the eyes are. It is a fact, however, that it generally cuts them quite judiciously! Occasionally there will be one which you would not have cut as the machine cuts it. The great point is to have the potatoes *as near one size as possible*, and the rounder they are the better the machine cuts them. Mr. TRUE, the inventor, came up here to show me how to operate the machine. He is a farmers' son, and has spent several years on his father's farm, in bringing the machine to its present state of perfection. I was much pleased with his unassuming manners. He did not attempt to persuade me that the machine would accomplish impossibilities. He frankly admitted, when he saw my Fluke and Prince Albert potatoes, that it would not plant them with the regularity desired, on account of their long, thin shape. In Maine, he said, they raised, principally, the Jackson White, and another variety, the name of which I have forgotten, both of which are nearly round, with the eyes evenly distributed over the potato, so that if the machine is set to cut them in two or even in three pieces, you would be pretty sure to get a sufficient number of eyes. But with a long, thin potato, the machine, as at present made, will not work to advantage. I have planted the peach-blows, which are nearly round, and if they are properly sized, the machine will plant them, I think, with great regularity. I do not mean of course, that all the potatoes you plant must be of the same size, but merely that all that are put in the hopper at a given time, must be as near the same size as possible. The machine can be set to plant any size desired, but it will not plant a large potato and a small one at the same time.

It is a great point gained when one becomes thoroughly convinced that *weeds can be killed*. It seems strange that any one should doubt it, and yet there is a latent conviction in the minds of many, that they spring up spontaneously out of the soil, and that it is vain to hope to destroy them. Last spring when, as the phrase is, I commenced to "make my garden," Dutch George, who had been on the place for several years, asked me:

"Do you expect to raise anything here?"

"Certainly," I said "why not?"

"Why, because the weeds will smother everything. We've tried it."

"But I will kill them."

"You can't do it. We've tried."

"I will sow and plant everything in rows and hoe thoroughly, and we will see if the weeds cannot be kept down."

He laughed outright. Till then he evidently thought that I intended to kill them in some new way, and he was much amused at my verdancy in thinking that they could be killed with the hoe.

"You can't do it," he said. "We've tried. The more you hoe the more they grow."

Well, I confess, that I had a tough job. The weeds came up by the million, but I set the Dutch women to work, and kept them hoeing as long as the weeds showed themselves. The dry weather was favorable, and every hoeing told immensely. By fall not a sign of a weed was to be seen. I then plowed it, and this spring it was as mellow and clean as could be desired. True there are *some* weeds this spring, but all who saw the land last spring, admit that the hoe has triumphed gloriously. On the other side of the house there was a piece of land which I offered my foreman for a garden. It was beautifully located, and nice warm soil, but he refused to take it, because it was so full of weed seeds that nothing could grow! I planted it to beans and hoed them thoroughly. Had a good crop, and this spring the land is as clean as any I am acquainted with. Were I a poet I would sing the praises of the hoe. I like to have it as sharp as a razor. I file mine every time it becomes a little dull. It is astonishing how much easier it cuts off the weeds. It is a pleasure to use a sharp hoe, and farmers should see to it that their sons—to say nothing of the other sex—have good sharp hoes. Create in them a taste for hoeing and killing weeds. It will do as much as any one thing to make good farmers of them. Another thing: Let the handle be made smooth with sand paper and then *oil it*. Linseed oil is best, but any kind of oil or grease will be better than nothing.

What is the best way to kill this quack, I asked a farmer the other day. "Well," said he, "buckwheat will kill it sure, and they say peach-blow potatoes will."

A good heavy crop of almost anything will check the weeds. But depend upon it he is a poor farmer who is always looking for some crop that will destroy weeds. Weeds are sent to *compel* lazy people to work their land. Good plowing, cultivating, hoeing, &c., are needed to make the land mellow, and to prepare it for the seed and the roots of plants; but who would do this if there were no weeds to destroy? Did you ever have a patch of land that you wished to rake over just as the weeds were starting? You can kill



more weeds in this way in an hour than in half a day after they have grown larger. But the agricultural mind does not take in the idea readily. Set a man at it and he thinks it is a waste of labor, and will work with little spirit. But tell him to sow on some superphosphate, and rake it in thoroughly, and he will work with a will. Of course you must not tell him that your object is not to cover up the superphosphate, but to kill the weeds!

It is always better to yield to the prejudices of farm men—and they are awfully prejudiced—when you can accomplish your object without letting them know that they are doing in their own way just what you want done. I rather like a man who is thoroughly conservative. He generally has other qualities associated with it that more than make up for any excess of old fogysm. I have always rather admired the old tenant farmers of Sir Robert Peel. When iron plows were first introduced, Sir Robert wished his tenants to try them. They complied, but of course made up their minds that they were useless. But what could they say against them. That they worked well could not be denied, but, “we be all agreed, Sir Robert,” they said, “*that they produce weeds!*”

I was talking to Mr. Rathbone, of Genesee County, to day, about his dwarf pears. He has a large orchard and the trees are doing finely. He talked about my theory of the blight. You know I think that it is caused by a fungus produced from old roots and other woody matter in the soil. I did not ask him what he thought of this theory of the disease, but was pleased to hear him say that he was very careful to gather up the wood cut off in pruning. He had noticed one or two partial cases of blight, and said he had been careful to cut off the blighted portions, down into the sound wood, and burn them. So far so good, but I would give up all attempts to save a tree anyway affected. I would dig it up root and branch and burn it, and I would not set out another tree in its place, for a year or two at least—certainly not till I had fully satisfied myself that there was no old roots left in the soil, and especially none affected with the white spawn of the fungus. Better have a few vacancies, bad as they look, than to run any risk of spreading the disease.

There will be a great crop of cherries this season, if the curculio does not take more than half of them. I never saw the trees so loaded. If people would only take a little pains to gather up and destroy the fallen fruit, which contains the larvæ of the insect, we should soon lessen the number of this pest; and the same is true of the plum, apricot, &c. It will not save this year's crop, but will lessen the number of the insects next year. The reason why we are so

unsuccessful in fighting insects, is, that we do not commence early enough. They multiply so enormously that the destruction of a female or of a nest of eggs is equivalent to destroying *a million* a year or two hence. We have been trying to save our currants from the caterpillars. By examining the bushes the middle of May the flies can easily be killed, and under the leaves will be found eggs in abundance, which can be readily crushed. This is not unpleasant work, but to kill the caterpillars themselves after they have grown to some size, is a different operation. We found one leaf with 135 eggs on it, and there were many leaves on the same bush with from 60 to 100 eggs on them. They are killed in a moment, but let them hatch and it is not an easy matter to kill them in any way yet discovered. There will be a second brood of these insects in a few weeks and they must not be neglected. We can raise just as good currants as ever, but we must look to the insects, and attend to the matter in time.

My onions are looking splendidly. I got the seed from Mr. GREGORY, and it was evidently of first quality. Last year I failed entirely, owing in part to poor seed and not sowing early enough. I presume this year the price of onions will be low; and it is a crop that cannot be kept over. If there is no demand for them they can be fed out to cattle. They are exceedingly fond of them. But of course they must not be fed to milch cows, or even to cattle that are shortly to be killed for beef. The onions will communicate their flavor to the beef. With working oxen and young cattle this objection does not hold. Onions are quite nutritious, and the avidity with which cattle eat them, indicates that they are good for them.

One of the best agricultural authorities in this country—and I know no better in any country—writes: “I read your remarks on the rearing and fattening of Merino sheep with much pleasure. They deserve general attention. Mr. Johnston does well fattening what he calls Merino sheep, because he buys them at mature age at a low price. By the way, I do not suppose many, if any, of them are full blood Merino. Those which I saw at his farm a few years since were evidently of mixed blood, though the Merino generally predominated. But in a test of breeds we must base everything on the first starting of the animals. Somebody must breed and rear them, and the question with which the public is concerned, is the relative cost and profit of the animals in their lifetime. It is surprising that this should be so frequently overlooked.”

The sheep Mr. JOHNSTON fattened were not full-blood Merinos. They were the common fine woolled sheep of the country, such sheep as in five cases out of six, would be found on ordinary farms in this sec-



tion. Mr. J. says, he cannot fatten the "American" Merinos that exhale "gas tar."

As our friend says, the question of the relative profit of different breeds must be determined, not merely while they are fattening, but for the whole period of their existence. It is of course important to know which are the most profitable sheep to fatten, but it is of still greater importance to know which is the most profitable breed for the farmer to raise and to keep till sold to the butcher. This is a question which should be fully discussed by intelligent farmers in a candid and impartial manner.

A farmer asked me to-day, as he was riding past, whether it was better to use tiles or stones for underdrains, and which was the cheapest. I think a stone drain can be made just as efficient as a tile drain, no better and no worse; and then in regard to the cost of making the drains with stones or tiles, I told him that it depended on the men he got to dig the drains. If he could get men that knew how to dig narrow drains, no wider than is necessary for the tiles, using narrow spades and a scoop to clean out the bottom, a drain might be dug in less than half the time required to dig a drain wide enough to lay stones in. But if he got men who could not be persuaded to dig a narrow drain, and who would persist in digging them just as wide for small tiles as for stones, he might just as well use stones if he had them near by on the land.

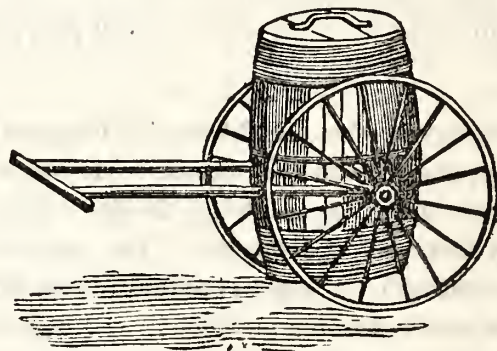
One of my neighbors told me this morning (May 29) that he wanted rain. Not he. All he wants is a well drained and well cultivated soil. The season is very favorable. Let us be thankful—and keep the cultivator going!

The papers state that in Washington "laborers are plenty at one dollar a day." Here we have to pay \$1 50. The Railroad Company pays \$1 37½ per day. Wages must come down. I heard a builder say to-day, that he had never known so few buildings going up and so many masons out of employment in the city, as at the present time. I think men ought to be well paid for their work, but extravagant wages are injurious to all concerned.

I see that the Legislature has passed a law for the protection of the Cheese Factories, to prevent the adulteration of milk. One of the provisions imposes a fine of \$25 for not putting the "strippings" with the rest of the milk. They are much richer than the first drawn milk. I wish they would pass a law that every person employed to milk cows who neglected to strip them clean, should be publicly horse-whipt! You do not only lose the richest of the milk by their carelessness, but the cows soon dry up.

#### A PORTABLE SWILL BARREL.

We generally use a wheel barrow for this purpose from which the bottom boards are removed, and two pieces of iron run across and are bent down so as to form a place for the bottom of the barrel to rest on. The objection to it is that when the handles of the barrow are raised the barrel is not quite level. Still it answers the purpose. The *American Agriculturist* describes one which is evenly balanced, on a pair of wheels, three feet in diameter, the spokes and felloes of which should be made of the best material in order to secure great strength and lightness. Dress out a stick of tough wood for an axletree, about two inches square, and make an axle-arm on each end of it to fit the wheels. The length of the main part of the axletree, between the wheels, should be about thirty inches. Make a square mortise through two opposite sides of the barrel, just large enough to receive the axletree. Let the work be done neatly, so as to secure a good fit, and calk the cracks with tow, or with the strands of a rope picked to pieces. Two straight sticks for thills, with a cross



piece connecting the forward ends, are bolted to the axletree with small carriage bolts. The axletree should pass through the barrel, a little below the bilge, provided the wheels are high enough to swing it clear from the ground.

The advantages of such a portable swill barrel will be readily appreciated by every one who desires to keep the offensive odor, which always arises from the piggery, at a distance from the dwelling house. The barrel, wheeled to the door of the kitchen, may receive the swill, and can then be trundled back to the piggery. Thus we dispense with all the disagreeable handling and spilling of swill, unavoidable when a swill barrel is stationary and the swill is carried in pails from the kitchen to the sty. Another very important consideration is, that if an inclined plane be made for the wheels to run upon, the contents of the barrel may be poured directly into another barrel, or into the feeding trough, by simply elevating the shafts so as to turn the barrel over backwards. A barrel may be supported on wheels in this manner, for the purpose of carrying water to stock of any kind, or for any other purpose where it is usual to carry water, liquid manure, etc., in pails. A lid should fit the top of the barrel closely, to keep the liquid from slopping over.



## SWINE—CHARACTERISTICS OF BREEDS, &amp;c.

WE are indebted to Sanford Howard, Esq., Secretary of the Michigan Agricultural College, for advance sheets of a treatise on Swine—Characteristics of Breeds, &c., prepared by him for his forthcoming Report. There are few men so well qualified to do such a subject justice as Mr. Howard, and our readers will be interested in a summary of his remarks:

The Hog is not a native of America, but in the uncultivated parts of Europe, Asia and Africa, the wild hog has existed from time immemorial. The domestic hog is unquestionably derived from the wild species. The subjugated animal, however, differs greatly in disposition and instincts from his untamed ancestors. The common hog is as dependent as most other domestic animals. In his natural state, on the contrary, he is sagacious, bold and independent. When of mature age, and in full possession of all his faculties, he acknowledges no superior, and will not turn from his path for the proudest beast of the forest. Even the tiger and lion have found themselves unable to withstand his furious charge, and have been laid in the dust never to rise again by wounds from his formidable tusks. But the domestic hog soon regains many of the primitive habits of the race, when allowed his liberty in situations where he can supply himself with food. The semi-wild character of the "woods hog" of our Southern and Western States, shows this.

The swine of the United States have been derived chiefly from Great Britain, though occasional importations have been made from other countries. The British stock of the present day consists of various mixtures of aboriginal races of that country with various Asiatic stocks—chiefly Chinese and Siamese. The original English hog was a large coarse unthrifty animal, with a long, broad snout, large, flapping ears, low in the shoulders, long in the back, flat-sided, long in the limbs and large boned, with a thick hide covered with coarse bristles. The Chinese hog, which has proved so useful in correcting the defects of the old English breed, is small boned with a remarkable disposition to lay on fat. The fat, however, is of too oily a character. The improvement which has been effected by means of the Chinese race, has resulted in the first place from lessening the bone and increasing the aptitude to fatten of the stocks with which they have been crossed, and afterwards selected from the cross-bred stock such specimens as possessed the requisite points as to symmetry.

The general wants of the community in relation to pork, can be supplied by two classes of hogs, one for supplying the market with meat to be eaten fresh, and for bacon; the other for making pork for barreling.

Among the most popular breeds of swine for the production of *clean pork*, Mr. Howard names the following:

The Improved Suffolk.

The Large Yorkshire.

The Lincolnshire.

The Leicestershire.

The Byfield, or Newbury White.

The Mackay.

The Bedford, or Woburn.

The Chester County, or Chester White.

The Improved Suffolk is one of the most highly esteemed and valuable breeds, but its reputation has suffered from the indifferent and worthless animals that were scattered over the country a few years since by speculators.

He has heard objections made to the Suffolks because they are not large enough, but Mr. H. truly remarks: "There is no difficulty in obtaining specimens of this breed that will reach the weight of 350 to 400 pounds, dressed, at twelve to eighteen months old. If fairly fed, they will always be in a condition to kill from the time they are a month old."

The Large Yorkshire, is a breed of the largest class—specimens frequently reaching the weight of 600 to 700 pounds and sometimes 800 pounds or more dressed, at two to three years old. Notwithstanding this enormous size, they are not a coarse animal. Their color is invariably white.

The Lincolnshire is also a large breed, and was formerly quite celebrated. An intermixture with the Chinese has produced a smaller breed that matures earlier. Both the large and the small Lincolnshires have been introduced into this country, but are not now kept as a distinct breed. The former, Mr. H. states, is said to have been one of the parent stocks of the Chester-White.

The Leicestershire was for a time one of the most popular breeds in England. It was derived from the stock of the celebrated breeder, Robert Bakewell. It was white, of large size, and doubtless did much towards the improvement of the large varieties of Britain, generally. They were, several years ago, well known and quite popular in this country; but the stock has degenerated, and is hardly to be found at the present day, possessing its original characteristics.

The Byfield, or Newbury-White breed, is of American origin. It first attracted attention upwards of 60 years ago. It is believed to have derived its valuable qualities either from the African or Chinese pig. No vestige of the breed is now to be found, though it is still common to see advertisements of pigs represented to be of this breed!

The Mackay breed is also of American origin. The late Captain John Mackay of Boston, had a farm



at Weston, Mass., on which he collected many hogs from different parts of the world. These various breeds were bred together, and the Mackay breed was the result. The breed, however, on account of its diversified origin, never became sufficiently established, to be a distinct breed, and it is now extinct.

The Bedford, or Woburn breed, originated on the state of the Duke of Bedford, at Woburn. It was for some time one of the most valuable varieties known. Various importations of this breed have been made into this country. The first were sent as a present to General Washington by the Duke of Bedford in 1792. Some of the descendants of this importation were introduced into Massachusetts by Col. Timothy Pickering, who was then Secretary of State under a portion of Washington's administration, and who then and afterwards manifested great interest in agricultural affairs. The breed was extensively propagated in Massachusetts for many years, and as hogs of medium size, and especially for slaughtering at six to eight months old, they have never been surpassed. Nothing like a full-blood of the breed has been seen for twenty years or more. Diluted strains of the blood lingered later in what was called the "Hospital Breed," kept at the hospital for the insane, Worcester, Mass., but it would be difficult to recognize a trace of it at the present time.

The Chester County, or Chester White, take their name from Chester County Pennsylvania. Mr. H. says :

"Their origin is said to have been, in part, some large English hogs, much resembling the large Lincolnshire before described. They had considerable local reputation twenty or thirty years ago. Many persons, however, in Pennsylvania, who had kept them, resorted to crosses, more or less, with the Suffolk and similar breeds, several years since, for the purpose of correcting what was regarded as too much coarseness in the Chester stock. Of late, the Chesters have been much sought after by persons whose swine, from various causes, have become too small. The Chester County hog, as the writer first saw it in Pennsylvania, many years ago, may be described as of a white color ; of comparatively large size ; the head rather large ; the nose or snout thick, but not long for the size of the animal ; the ears large, thick, and flapping ; the body rather long and tolerably round ; the back generally hollowing, frequently with a considerable settle immediately behind the shoulders ; the legs generally large in proportion to the size of the body, and in fat animals frequently giving way so much as to bring the pastern joints fully to the ground ; the skin rather thick, and covered with long, wavy bristles.

Many of the hogs which under the name of Chester-County, or Chester-White have been sent over

the country of late years, differ from the above description in having upright and somewhat thin ears, less bristles, and less coarseness of bone—all indicating a cross with some finer stock."

The above breeds, as before stated, are those most popular for the production of *clear pork*. Many families, who put up pork for their own use, do not desire such clear fat ; a carcass comprising more lean—fine grained, tender and juicy—could be used with less waste, and would at the same time be more acceptable to the palate. Besides, in our cities and large towns, a great quantity of pork is consumed in its fresh state. To be best adapted to this purpose, swine should be small boned, only moderately fat, but plump and meaty, the flesh fine grained, and of the best quality as to flavor. Of breeds that are best adapted to these purposes, and for making bacon, Mr. Howard mentions the following :

The Neapolitan,  
The Improved Essex,  
The Berkshire,  
The Hampshire.

The Neapolitan is the most celebrated of the Italian breeds—all of them of remarkable excellence, and descended according to MARTIN, from breeds established before Rome fell. Some of the most esteemed English breeds have derived their excellence from the Neapolitan. They have been introduced into this country, but are not sufficiently hardy to bear the exposure that swine ordinarily endure in this climate. They are a small, black breed, almost destitute of bristles, short in the snout, small in the bone, with sharp, erect, ears, and with a remarkable aptitude to fatten. Their value consists in imparting these qualities to harder breeds.

The Improved Essex is one of the most valuable breeds now known. It derives its excellence from the Neapolitan, and like it is of a black color, with more size, firmer symmetry, and much better constitution. It has carried off more prizes at the Smithfield show than any other breed.

The Improved Berkshire, according to Youatt, and other authorities, the result of judicious crossing of the large old fashioned Berkshires with Siamese, Chinese and Neapolitan. It was introduced into this country about 1840, and was for awhile very popular. Many of our people have reason to remember the "Berkshire fever"—some from the money they made, and others from the money they lost by it. During the excitement alluded to, the breed was represented by speculators as far more valuable than any other, and specimens were sold at enormous prices. But their popularity soon declined, and from the height to which they had been raised they went down to the opposite extreme in general estimation. The causes of this reversion of public



opinion were various. One, and not the least important, was the exaggerated representations of their merits, made by interested parties. People found that they did not come up to the standard which enthusiasts or sharpers had made, and being disappointed in this, refused to see or acknowledge the true value which actually belonged to the breed. Another cause of their decline was the character of their meat. The Berkshire is, in all its phases, a lean-meated hog. Hence the pork is not so well adapted to barreling as that of some other breeds. It is, as before stated, clear, unmixed fat, that the packers want.

But it may be supposed that the meat was well adapted to the fresh-meat market, and to making into bacon. This was the case to a certain extent. Some of the Berkshires were well suited to these purposes. The breed, however, varied greatly in character, according as the old Berkshires, or the breeds with which they had been crossed, predominated. The large, lop-eared ones, which sometimes weighed 600 pounds, or upwards, each, dressed, were often coarse-fleshed, and not liked on that account. The very smallest, partaking most of the Siamese character, lacked constitution, and were not prolific; but their flesh was fine grained and good. The medium sized ones, weighing about 300 pounds, dressed at twelve to eighteen months old, were in every respect useful hogs, except for the production of *clear* pork.

The Hampshire is sometimes confounded with the Berkshire, but its body is longer and its sides flatter. The color is usually dark spotted, but is sometimes black, and sometimes white. The modern breed is composed of the large old Hampshire race, with the Essex, Chinese, and Neapolitan.

In concluding his paper, Mr. Howard justly remarks, that with selection of swine, as well as cattle and other animals, regard should be had to the conditions or circumstances in which they are to be placed. All of the improved breeds, so called, though possessing various merits in reference to certain purposes, are less fitted to make a living for themselves than animals less advanced from the original type. The quiet disposition and tendency to fatten, for which some breeds are justly valued, must give place in the "woods hog," or one destined to live by its own unassisted energies, to a habit of activity and a tendency to muscular fibre. Instead of the thin skin and scanty bristles of the *refined* varieties, the hog which is left to provide for himself, must be clad in a manner to protect him from the weather and shield him against the attacks of his enemies. Even in common farm management, the thinness of skin and absence of bristles may be carried too far. These traits, though indicative of aptitude to fatten, impair the constitution, when they exist in an extreme degree, and render the animal unfitted for ordinary exposure.

#### THE HEXHAM FARMERS' CLUB.

THE readers of the *Genesee Farmer* have frequently seen extracts from the reports of the Hexham Farmers' Club, in Northumberland. From no other discussions in Great Britain do we derive more information on agricultural matters. It seems from a recent article in the *Irish Farmers' Gazette*, that this club was started nineteen years ago, by Mr. John Grey, a land owner and active agriculturist in the district. "At present," says the *Gazette*, "there are 221 members, and the club library contains about 500 volumes. The subscription is only 5s. per annum, which is sufficient, as the club does not hold shows or plowing matches, leaving those matters to a society which embraces a wider district in its operations. Some trials of reaping machines, &c., have been made by the club, but its members confine themselves chiefly to the discussion of useful subjects bearing upon agriculture. The meetings are held monthly, from October until April, and for several years the annual addresses delivered by Mr. Grey have been received with great interest, not only by the agricultural, but also by the political journals, owing to the amount of sound teaching conveyed by him on those occasions relative to matters in which society at large, as well as agriculturists, are interested. That the club has been of much service in promoting agricultural improvement is well known, and its success should incite others to form similar associations throughout the country. The celebrity of the Hexham Club may not, indeed, be attained; but, nevertheless, much good might undoubtedly be done in a quiet way." Why cannot such a club be formed in Rochester?

ARTIFICIAL COMB FOR BEES.—A Swiss invention has been introduced into this country, to aid bees in the formation of their comb. Narrow sheets of wax are imprinted by machinery, so as exactly to represent the dividing wall of comb between the cells. These stripes are attached to the top of the empty hive, before the new swarm is put in, thus enabling the bees to go immediately to work, and also in guiding them in making the sheets of comb in the proper direction.

MANURE.—The *American Agriculturist* says:—"Manure is like money. No farmer ever has too much of it who appreciates in what his wealth lies." And it may also be added that like money, the more a man has the easier it is to get more.

It is said that sugar beets cut into thin slices are excellent food for young calves, and that they eat them with avidity, requiring less milk and keeping sleek and fat.



## ROOT CROPS.

THE turnip is the great "root crop" of England. It owes its great value in that country to several causes, among which may be mentioned: 1st. The opportunity the crop affords for cleaning the land, both before and after the seed is sown. It is justly termed "a fallow crop." The land is usually plowed two or three times before seeding, with repeated harrowings, rolling, &c., till the soil is as clean and mellow as a garden. Then the seed is drilled on ridges, from two to two and a half feet apart, and the scuffle or horse hoe constantly used between the rows. The plants are thinned out with a hoe about a foot apart, and the crop is generally gone over with the hoe once afterwards, to single out any plants

the formation of bulbs. We have also another advantage: It is not necessary to sow the seed as early as in England, and this affords a better opportunity for cleaning the land. So far as the growth of the crop is concerned, therefore, the advantages are pretty nearly balanced. The only decided advantage which the English turnip grower has over us, is in being able to consume the turnips on the land, by sheep. When the turnips are drawn off the land for fattening beasts in the yard, as is the case on the heavier class of soils, the American farmer can raise turnips to nearly as great advantage as the Britain farmer.

These considerations lead us to this conclusion: We should aim to raise roots which, other things



that may have been left double, and to kill any chance weeds. A properly managed turnip field is as thoroughly cleaned as the best summer fallow could make it. 2d, A larger amount of nutriment can be obtained per acre, than from any grass or grain crop. And this immense quantity of succulent food enables the farmer to keep a stock of cattle and sheep in winter, fully as large as during the summer, and to turn them out fat at a season when meat brings the highest price. 3d. The moist summer climate of England, is favorable to the growth of the crop, while the moderate weather in winter, permits the crops to be consumed *on the land* where it is grown, by sheep.

It will be readily seen, in that respect, our circumstances differ from those above alluded to. Our dry summers are not as favorable to the growth of the crop as the cooler and moister weather of England and Ireland. But on the other hand, we usually have, in this section, a long autumn, which favors

being equal, *contain the most nutriment in a given bulk.*

Saying nothing about carrots which are seldom cultivated as an ordinary farm crop, mangold wurzel contain about double the amount of nutriment as common white turnips, and are on many accounts the most profitable root crop for American farmers to raise. They are less affected by dry weather; will keep longer and do not impart that unpleasant taste to milk which is one drawback to the use of turnips for milch cows. And, as we have before said, one bushel of mangolds contain as much real food as two bushels of white turnips, and consequently we save half the expense of handling and storing the crop.

We say nothing about the extra amount of food which can be obtained from an acre of mangolds, as compared with turnips, for to obtain this amount we need richer land, and the crop must be sown earlier. But there can be no doubt that on good, rich, strong



land, at least three times the amount of food can be obtained from an acre of mangolds, as from the best kind of white turnips.

The Swedish Turnip, or as it is usually called in this country, the ruta бага, contains the largest amount of nutriment of any of the turnip family, and the remarks which we have made in regard to mangold wurzel, will apply to this crop. We get the advantage of more nutriment in a given bulk, and save much of the expense of handling and storing.

The common white turnip contains less nutriment than any other. We have known specimens that contain only 6 per cent. of dry substance, while ruta bagas contain from 10 to 12 per cent, and mangolds from 12 to 15 per cent.

When turnips have to be stored for winter use, the expense of handling such varieties as the strap leaved turnip, will amount to three fourths the value of the crop. The English farmers can raise these varieties to advantage, because they can be consumed on the land. They require less care in cultivation than ruta bagas, and though so watery, a large amount of nutriment can be obtained on an acre.

The aim of the American farmer, therefore, should be first mangold wurzel, next ruta bagas, and as a crop which can be sown late, and requires comparatively little cultivation, the common white turnip.

In saying, "comparatively little cultivation," we would not be misunderstood. The great mistake which is usually made in attempting to raise turnips is in not giving them good cultivation. Turnips *must* have good mellow land and clean, thorough cultivation. An English farmer usually expends about \$50 per acre on his turnip crop.

We think that as our system of agriculture advances—as advance it must and will—more root crops will be grown. In his admirable address delivered before the N. Y. State Agricultural Society, at its last annual meeting, the retiring President, James O. Sheldon of Geneva, presented several statements of turnip crops raised in Canada, which prove that large crops can be raised in this climate. Mr. Sheldon, himself one of our most enterprising farmers and breeders, says: "If I have any fixed determination regarding my future course on the farm, it is to increase my root culture, and I intend to raise a sufficient quantity to allow each animal a moderate supply daily." He finds them "invaluable in rearing and feeding stock of all descriptions."

**A GOOD PIG.**—Samuel Williams, of Waterloo, N. Y., writes that a market gardener near that village killed an April pig in December that dressed 376 lbs. He sold it for 17 cents per lb., or \$63.92. Not a bad spring pig.

THE chopping or grinding of grain to be fed to stock operates as a saving of at least 25 per cent.

## THE "GREAT IMPROVEMENT" IN SHEEP.

THE *New Hampshire Journal of Agriculture* quotes from an exchange various assertions as to the wonderful "improvement" in Merino sheep claimed by some to have taken place within five, ten, fifteen or twenty years, and adds the following statements:

Now this *improvement* begins about the time that the *shrinkage* in fine wool began to increase. Fifteen or twenty years since the shrinkage in fine wool in New England was but 35 per cent., and it has been increasing every year since, until *to day* it is from 48 to 54 per cent. on selected, washed wool, and upon unwashed wool it is 72 per cent. No wonder that *wool pays* when *dirt is sold for wool*.

But people are loth to believe that fine wool shrinks at this rate. We have an incident in point. The owner of a flock of fine wooled sheep, came not long since to one of the heaviest manufacturers of wool in the parts, and wished to sell his clip of wool. The manufacturer said that its shrinkage was so great, that he did not wish to buy. "But," said the grower, "my wool does not shrink a great deal." "Well," was the reply, "if your wool does not shrink in cleansing badly, I will take it. You may bring me five or ten fleeces as a sample, and I will look at it and buy the lot if it be as you say." In a few days the grower came with five fleeces of wool. It was examined. "Now," says the manufacturer, "your wool will shrink 50 per cent. in scouring." "No, that can't be." "Well, I will scour it, and for every ounce it yields over 50 per cent. I will give you a gold dollar." "Agreed," said the grower, and the wool was scoured. "Now," said the manufacturer, "you must take the wool home and dry it, for the shrinkage will be so much, that if it were dried here, you would think we had taken some of the wool out of the parcel!" So the grower took the wool home to dry it and have it weighed! *But he has not come back for his gold dollars!*

In an answer to another assertion on the part of those who cultivate "heavy fleeces," we have the following:

No! the manufacturer will not pay a bounty of 68 cents on oil, nor "*washed* prices for wool *wet* in June and sheared in July." He won't buy it at all, and the clip of one, two and three years will remain on the farmer's hands. "That's what's the matter."

"A Vermont Farmer" is contributing a series of articles to the Brattleboro *Record*, on the sheep of that State, in which he ascribes the excellence of Vermont Merinos,—1. To their having had a better foundation to start from than any other State, in having more and better full-blood sheep to breed from; and, 2. To there having been more and better practical breeders. "And yet it does not follow," he



goes on to say, "that the greatest excellence has been attained, or that no errors have been committed—no, nor even that the sheep that have been sold highest are really the best sheep.

"While some have bred mainly with a view to the growth of wool—and these would seem to be the most legitimate wool-growers—many others have bred wholly with a view to the sale of sheep, and in this they have succeeded. And yet this does not prove that the sheep so sold were the best that could have been raised, or the best that have been raised. They were good for the seller, perhaps the best, in view of the profit he has realized from them. But were they the best for the buyer? If he can raise others from them and sell for similar prices they may be. But is this probable? It certainly is not sure to be so. A peculiar concurrence of circumstances has favored the sale of a peculiar kind of sheep. The manufacturers have either heedlessly or foolishly, purchased their wool in such a way as to favor the growth of gum and grease rather than wool. They have made it profitable for the grower to raise fleece composed of one-quarter wool and three-quarters gum, grease and dirt, and thus they have made sheep that yielded fleeces of this kind the most saleable. This has laid the foundation for our great sheep sales. This has given rise to the great call for heavy fleeced sheep, without regard to the amount of cleansed wool to be obtained from them.

"But what if there should be a change of policy in this respect, on the part of the manufacturers? What if the buyers should adopt a common sense practice, and should discriminate in their purchases so as to pay for only what they want to buy? What if they should buy in such a way as to make every fleece more or less valuable exactly in proportion to the amount of actual wool in it? What would be the effect of that upon the selling and the breeding of sheep? Why, then the man who should want to procure a superior ram for breeding purposes, instead of paying \$1,000 or \$5,000 for that whose fleece is made up of six pounds of wool and eighteen pounds of gum, grease and dirt, would sooner pay the same for one that yields seven pounds of wool, even if his whole fleece uncleansed should not weigh more than twelve or fourteen pounds, and even if it should not look so black as to make the sight of it dangerous to breeding ewes, lest it might cause them to have black lambs. Such sheep may then be preferred, even if they do not look any darker than it is natural for good full-blooded Merino sheep to be without any extra housing, pampering, or blackening over in any unnatural way whatever.

\* \* \* \* \*

"It is true this state of things has not yet come, and that our sheep breeders who have gone in for

gum rather than wool, have done the most cunning thing they could do as far as selling sheep is concerned. In this they have certainly been shrewd and successful. They have succeeded in raising sheep which, although perhaps of less value for any other purpose, have commanded higher prices than have ever been paid before. But there are strong indications that a different state of things is soon to take place. 'If coming events cast their shadows before,' then there is something indicated by the shadowy masses of heavy wool now lying unsold in the wool-rooms of many Vermont farmers. The clippings of several successive years are remaining unsold.—*Country Gentleman*.

#### A LAW FOR SCOUNDRELS AND BOYS.

IRENEUS, in the New York Observer, comments upon a law just passed by the New York Legislature, that "any person who maliciously or wantonly injure any ornamental tree, shrub, or plant, whether situated on any private ground, or on any street, public place, public or private way or cemetery, shall be deemed guilty of a misdemeanor, and, upon conviction, shall, for each and every such offence, be punished by a fine not exceeding two hundred and fifty dollars, or by imprisonment not exceeding six months, or by both such fine and imprisonment."

If this law was the law also of every State, it would gradually work a great and good reform. And I think it quite likely that by degrees it will be enacted in other States, until the advertising nuisance is abated, the land over.

The first clause is also a very proper provision. There is a passion among vulgar curiosity hunters to carry off bits of marble from every monument they visit, and so dead are they to the meanness of the theft, that they never think that the piece they show is a monument of their own shame. They would crack off a corner of every marble in Westminster Abbey if they could do it without being detected. Some years ago one of these vandals wrote me a letter from Jerusalem describing the valuable curiosities he had collected by chipping off fragments from this tomb and from that fountain, and he was greatly horrified when I denounced him as a robber, instead of congratulating him and the public on the interesting relics he was bringing home.

One of these fellows, an English clergyman I believe he was, went into the sepulchre of Whitefield under the pulpit in the venerable church at Newburyport, and not content with doing as I did—taking up the skull reverently in my hands and putting it back into its place—he stole one of the arm bones and carried it off to his native land, as a great curiosity! He gave it to a gentleman who had sufficient good taste to see the gross impropriety of the felony, and he sent it back to its companions where it now



lies. This habit, too common all the world over, deserves to be classed among the misdemeanors and punished accordingly.

And the second clause is equally important, more so in our country than in any other, because our people, especially young America, are more addicted to the work of destroying trees, shrubs, &c., than the inhabitants of most countries are. In France the people have the freest range through parks where the walks are lined with flowers, but no one thinks of touching them. They are placed there for the enjoyment of all, and no one will be so thoughtless or so base as to appropriate them to his own use. Here it is not so safe to have flowers where they can be reached. In Greenwood a lady is now and then fined five dollars for plucking a rose. In the Central Park it is not expected that visitors will cary flowers there, because the guardians wish to be able to know that every one with flowers has stolen them. Hereafter the picking a flower may come under the forbidden things in this law, and subject the culprit to a fine of \$250, or a rest in jail of six months. The same law applies to those little theives who slip within your gateway, or reach through the fence and despoil your shrubs and plants of their beauty. All this petty but very anoying theiving is now to be broken up, as soon as the people, young and not young, come to understand that there is a *law* to punish it as it deserves. Heretofore the only remedy has been in an action for damages, but the damage is little compared with the real injury one suffers in feeling, when the trees or plants on which he had set his heart are ruthlessly pulled to pieces by passing strangers. It will take some time to get this good law into the minds of the million. The newspapers ought to publish it universally for the public benefit. But even then there will be many to whom it will not come. It would be well to post it as a notice on the highways, and let all men know that there is a law to protect even the bark of a tree on the roadside.

When Rev. Sydney Smith went to live in a rural parish in Yorkshire, he says: "Each farmer kept a huge mastiff dog ranging at large, and ready to make his morning meal on clergy or laity, as best suited his particular taste. I never could approach a cottage in pursuit of my calling, but I rushed into the jaws of one of these shaggy monsters. I scolded, preached and prayed, without avail; so I determined to try what fear for their pockets might do. Forthwith appeared in the county papers a minute account of a trial of a farmer, at the Northampton sessions, for keeping dogs unconfined, where said farmer was not only fined five pounds and reprimanded by the magistrates, but sentenced to three months' imprisonment. The effect was wonderful and the reign of Cerberus ceased in the land."

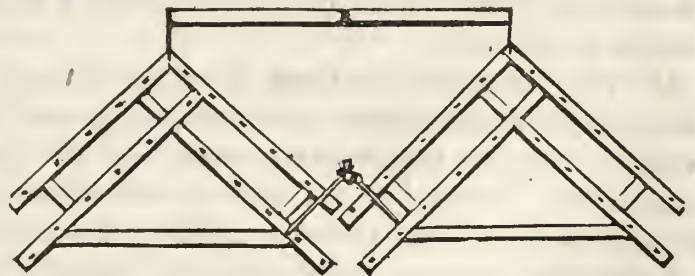
## HORSES AT PASTURE.

EVERY horse in the country ought, if possible, to have at least a few weeks' run in the pasture. It will do for him what no kind of medicine or nursing can do as well. It will improve his hoofs, his hair and skin, his wind, his digestion, and blood, will take out stiffness and lameness, and put on flesh, and infuse new life generally.

Before turning horses out, it is well to accustom them gradually to that kind of food, by cutting a little grass for them each day, or allowing them to "bait" for an hour or so daily in the back yard. And when let out, they should not have "flush" feed at first, as they will be likely to over-eat, and injure themselves, both in their looks and their wind. The best grass for a horse pasture is a mixture of Timothy, Blue grass, and Red Top. Horses relish this feed better when it is moderately short. When they are to be turned out for any length of time, and not to be used much in the meantime, they should have on only a light pair of shoes. This will allow the hoofs to come in close contact with the soft earth, and will prevent contraction. Where horses cannot enjoy pasturage, they should have fresh cut grass as often as convenient, and should have their stall floors covered with tan bark, or better, have the planks taken up and clay floors laid.—*American Agriculturist*.

## A CANADIAN HARROW.

MR. ANDREW BLACK, of Warkworth, Percy, C W., sends a sketch of a harrow to the *Canada Farmer*, which he says works much easier than a common harrow, does the work equally well, and covers more ground. It is especially useful on land only



partially cleared of stumps. Mr. B. does not describe it, but the accompanying cut will give an idea of its construction. He states that he intends to make a set of three harrows, to be drawn by three horses, and wide enough to harrow a whole land at once.

**CORN AS BEAN POLES:**—A substitute for bean poles is to plant two or three grains of Southern corn in each hill of beans, which, if necessary, may be tied together to support the bean vine more firmly.

So says one of our contemporaries. Those who desire a good crop of beans, had better not resort to any such a substitution for poles. If the corn grows as high as is necessary, it would leave very little plant-food and moisture in the ground for the beans.



## FARMING ON TYNESIDE.

A CORRESPONDENT of the *Irish Farmers' Gazette*, who is writing a series of articles, headed "Rambles by Road and by Rail," in his last letter from Northumberland, in the north of England, gives an interesting account of some of the farms in that neighborhood, from which we make a few extracts:

The courts, or "curtains," or "hammells," as the enclosures are termed in which cattle on Tyneside farms are chiefly kept, are usually open yards with a shed at one end. They vary in size, some holding three or four beasts, and others double the number. The turnip troughs run along the wall which divides one court from another, and a great improvement has been introduced on several farms on the Hospital estate, by carrying the dividing wall to a greater height, and then putting a roof over, so that the troughs on each side are covered. This is of much service to the cattle when feeding in wet weather, and the improvement is effected at very little extra cost. Boxes have also been introduced at some of the farm steadings, one fattening animal occupying each box.

There is a very complete set of such boxes on the farm of Dilstonhaugh, of which Mr. Thomson is the tenant. Two ranges face each other, the space between being open above. The roofs, a single lean-to in each case, are supported in front on cast iron pillars, fitted with grooves for the reception of the planks which close up the front, and which are increased in number as the manure accumulates in the box. Each box is eight feet in width, and eleven feet from the front to the back wall. It is just as if a long cart-shed had been divided into sections of the size mentioned, and a single fattening heifer or bullock put in each.

Mr. Thomson's fattening beasts have got during the past season half a stone each of roughly ground wheat as a mid-day feed, with a morning and afternoon feed of sliced turnips. A week or two before going off to market, the fat beasts are allowed some cake, in order to improve their touch. Mr. Thomson has used wheat largely during the past season—not, indeed, his best wheat—and the effect has evidently been to increase the tallow considerably beyond the proportion it bore in previous years, when wheat was not used. Mr. Thomson's store beasts also get a daily feed composed of half wheat meal, roughly ground, and half light oats, with some turnips. We also found a considerable number of store beasts in a shedded yard at a distance from the stading, and those beasts had been wintered on straw, with an allowance of  $3\frac{1}{2}$  lbs. each of rape-cake daily, but no turnips. On this keep they are in capital condition, and quite ready to go ahead on the grass. The wheat given to the fattening sheep at Dilstonhaugh

has not been ground, as no advantage was found when this was done. In the case of his farm horses, Mr. Thomson gives one feed daily of wheat meal mixed with a little bran, the other two daily feeds being made up of second oats. At first he cooked the wheat meal and bran before giving it to the horses, which answered very well, but it was troublesome; consequently, he tried what effect merely damping the stuff with cold water would have, and this, too, was satisfactory, but latterly he has found it quite as satisfactory to give the feed in a dry state. His horses are in splendid condition; in fact, one may travel a long way ere he sees five pair of such horses turned out on one farm, both as to shapes and condition.

Dilstonhaugh is a beautiful farm, and Mr. Thomson evidently does it every justice. His fields have been considerably enlarged, with a view of introducing steam plowing, for which we should think the farm well adapted. His neighbor, Mr. Lee, who occupies another large farm close to Dilston, is also a very skillful cultivator. In fact, so well is Mr. Lee known and esteemed as such, that he has always two or three young gentlemen residing with him as agricultural pupils—"mud-students," as they are termed in the north of England—and, perhaps, the best evidence of the care which Mr. Lee bestows upon his pupils will be found in the fact that Mr. Wrightson, who has recently been appointed professor of agriculture at Cirencester, was trained by Mr. Lee, and had only left him a very short time before getting that highly honorable appointment.

The farm horses in the district are generally of a compact, short-legged, active description, not too heavy, but up to their work. Swing plows are chiefly used; still, we did see a "Howard" here and there, and we should say that a deal of the land is well suited for the improved wheel-plow. In many cases we observed mere lads working a pair of horses, the high wages paid to older hands rendering it necessary to put a lad somewhat sooner between the stilts of a plow than was formerly the case. The ordinary wages paid to farm servants, single men, hired by the year and boarded in the farmhouse, ranges from £20 to £26 per annum, (\$100 to \$130.) Married farm servants have on an average 16s. a week, with cottage and small garden. They also receive annually 4 bushels of wheat, 60 stones of potatoes, and coals carted free. An addition of £1 is made to each man in harvest, or, in lieu of their dinner daily during that season. The married farm servant, or "hind," as he is termed, is bound to find a woman to work in the fields or barn throughout the year, for whose services 10d. a day in winter and 1s. a day in summer is paid. Regular laborers at other work 14s. to 15s. per week during



winter, say four months, and 16s. to 17s. throughout the rest of the year. Occasional laborers get about 1s. a week more than those who have constant employment. Draining, &c., is set by task work, and, of course, everything depends on the ability of the workmen; but they usually earn from 16s. to 20s. per week. Irishmen form a considerable proportion of the occasional laborers, as well as those who take occasional jobs at draining, &c.; and although the departure from Ireland of so many able laborers may be regretted when the ample field which exists for them in their own country is taken into consideration, yet, as that home field is not open to them, and does not afford them in most cases anything beyond temporary employment, they cannot be blamed when they seek out other openings for the exercise of their industry, such as those which the agricultural, as well as the mining and manufacturing, parts of England and Scotland present.

### THEORY OF LAND DRAINAGE.

A PLANT, though spreading its roots to a certain distance all around it in the soil, is stationary, and must have its food brought to it. That is the first main fact on which the need depends for a current of water through the land. Water, a powerful solvent, brings substances out of the air which the plant requires as food, and these substances increase its powers as a solvent of other matters in the soil which the plant also needs as food. Moreover, water brings from the air materials of use in the soil in manufacturing food for the use of plants. On all these grounds, then, it is of importance that water should go through the soil after going through the air. It becomes laden with vegetable food by passing through the air, and it becomes still more laden with vegetable food by passing through the soil, till, when traversing the soil, it passes stationary roots and enters them, and feeds the plants to which they belong. And there are special reasons why rain water should be induced to pass through the soil rather than lie stagnant on it. In the latter case it is not only useless to the plant, but it is directly mischievous. By evaporation it cools the surface, whereas by percolation through the land it carries the warmer temperature of the surface into the subsoil; and of what value this is to the growth of crops may be gathered from the experience of the last autumn, which has been so productive of growth in our pastures to so unusually late a season—not so much from the increased temperature of the air during November and December, which has been only about 2° or 3° above the average of the last 30 years, as from the increased temperature of the soil and subsoil at one and two feet deep, which has been 5° and 6° above the average of the past 13 years, during which observations have been made near

London. And not only is it of importance that rain, by passing through the land, should carry the temperature of the surface, warmed by the direct rays of the sun, downwards, rather than, by evaporating from the surface, it should carry the heat away and cool the soil; but the percolation rather than the stagnation of the water is desirable, because in the one case air is made to permeate the land, in the other it is excluded. The chemical changes which air produces on and in the soil are desirable, and result in the preparation of useful food for plants; while by its exclusion, substances of a poisonous nature, especially where iron and vegetable matter exist together in the soil, are formed.—*Morton's (English) Farmer's Calendar.*

### FOOT ROT IN SHEEP.

A CORRESPONDENT of the *Genesee Farmer*, writes to know how to cure foot rot in sheep. John Johnston, to whom we sent the inquiry, kindly replies as follows:

“Foot rot in sheep can be thoroughly cured by thorough paring of all the hoof from the diseased part, and applying a salve made of pulverized blue vitriol mixed with lard, butter, or any other grease. If hot weather, a little tar added to the mixture is an improvement. Those sheep that are diseased must be separated from the sound at the first dressing, but the sound must have salve applied to their feet, else some of them will become lame in a short time. The diseased ones should be dressed over again in a few days, say three or four, every foot being closely examined. See that no part of the hoof has been left covering the sore. The sound ones should be dressed over again in about a week from the first dressing, or sooner if any are seen lame. About three dressings in that way will generally effect a cure, if the paring has been thorough. It requires thorough work to eradicate that disease, but I know from experience that it can be done in the way I state. But if the land is wet where they pasture, or land that retains water on or near the surface for days after it rains, it is very difficult to keep the sheep sound in the feet.”

Mr. Johnston has had some experience in this matter, and we are glad to publish his method of curing this disease. Those who do not preserve the *Farmer*, should keep this article for future reference.

HOW TO LEAD ANIMALS.—Cattle, it is said, of all descriptions, horses, calves and sheep, may be led by making a slipping noose and fastening it to the lower jaw, passing the rope (which must be small) around the neck and through the noose on the jaw. It is a very easy way of leading a sheep, one not obliged to go behind and “push.” After once pulling, the sheep will follow right along with no trouble.



## NOTES BY S. W.

MONS. DECHARRUE, in a late publication, gives us the results of his experiments, which prove that the production of ammonia is completed in a porous soil from atmospheric air and water. This theory will be the more readily believed as it speaks to the life of all good tillers of the soil, from the days of old Sethro Full to the present time; it is on the principle that "hoeing is manuring."

I had long given up trying to grow pie-plant as early on my clay as my neighbors have it on light sandy soils; but this season I have learned that pie-plant will come forward as early on a clay soil as on sand, if the clay is sufficiently ameliorated by decomposed vegetable matter. The clay needs only to have its adhesiveness so far destroyed that it will neither pack down nor form lumps. As rhu-barb is the king of ammonia consuming plants, its early growth and luxuriance on a porous soil, is a case in point to illustrate Mons. D.'s theory. I have long been of opinion that a soil rich in potash, if well tilled, had power to decompose atmospheric air, form new combinations, and enrich itself; and Mons. D. at least would say, "*vous avez raison.*"

## TOMATO PLANTS.

The aphorism that "honesty is the best policy," seems to be illy understood by the growers of tomato plants for market; instead of planting them singly in the hot-bed, and transplanting from thence into pots to harden, they let them grow as close together as hogs' bristles, in the hot-bed, until they are six or eight inches high, and then stick them into pots for market, where they are called "well hardened plants;" as such plants have had all their fine roots broken off, they have to struggle for life two or three weeks after they are set out, and bear fruit no earlier than seedlings. I once bought some potted tomato plants that had all their fine roots intact; when the earth and plant was removed to the garden, the plant grew apace, as though it did not know it had been transplanted; but when I afterwards asked Daniel if he should have more such plants for sale the next season, he replied, "No, I can't compete with the rest of the trade; I have sold out." "What a simpleton," was my reply; "as soon as your honest fame was established, you quit business to lose your reward." I this spring grow tomato plants in the house; as soon as they are an inch or two high, I set them singly in small pots, with a piece of shingle over the hole in the bottom, so that the earth may be pushed out without disturbing the roots of the plants; but they need much care and frequent watering.

## OUR GRAIN EXPORTS.

H. C. Carey has been writing long letters to

Speaker Colfax, teaching him political economy. What will our grain-growing farmers say to his broad assertion, "that millions on millions of dollars worth of food, that ought to be consumed at home, has been forced upon the English market, thus lowering the price there, and that every reduction there is followed by a similar reduction here?" Had Mr. Carey been the Grand Tycoon of Japan, the ports of that country would not now have been opened to the trade of the world.

We have had a very forward spring, but rather wet and cool of late; even peas now refuse to luxuriate. It is said that we have the prospect of a great wheat crop.

Waterloo, May 11th, 1865.

## COUCH GRASS AS A MEDICINE, AND AS FOOD.

It is stated in the *Veterinarian*, that an infusion of the *Triticum repens*, couch, or twitch grass, in the proportion of one ounce of the dried and cut stem, to a pint of water, and given in the course of the day, has been found by Mr. H. Thompson, of the University Hospital, to be very beneficial in irritable conditions of the bladder. According to him, it is important that the plant should be gathered in the spring, shortly before the leaves appear; the stem is then to be slowly dried, without artificial heat, and cut into the requisite lengths for use.

Professor Burnett, in his excellent treatise on British plants, observes:—"The couch grass of the farmers, which is here regarded as a noisome weed, is collected on the continent as food for horses. Cattle of all kinds are fond of the underground shoots of this plant, which are both sweet and wholesome." Sir Humphrey Davy found them to contain nearly three times as much nutritious matter as the stalks and leaves. And it has been stated, on the authority of a French veterinary surgeon, that exhausted and worn out horses are often speedily restored to health and condition, by giving them daily one or two bundles of couch grass, of ten or twelve pounds each, mixed with carrots.—*Canada Farmer*.

DR. LEE says, in the *Country Gentleman*, in an article on Maryland and Virginia lands, that:

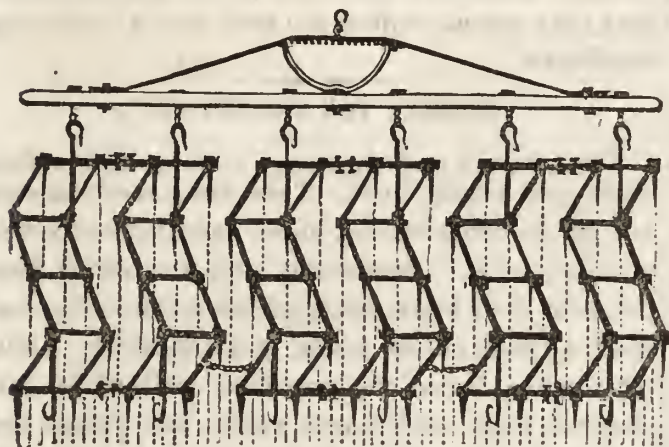
"Taking the District of Columbia as the climatic average of the two States, my experience here is that a man working four days in a week, may produce as much food and other necessities of life in a year, as he can in Central New York by working six days in a week. This problem is based on natural agricultural forces, which are as reliable as night and day, summer and winter."

This is probably true, *provided he has equally rich land from which to produce it.*



## HOWARDS ZIG ZAG HARROW.

In the common harrow, the outside parts do not act upon the land as fully as the center, and hence it is necessary to "lap" more or less, to render the work uniform. There are one or two obvious objections to this plan. It is not always easy to determine how much it is necessary to "lap," so that all the land shall be evenly harrowed, and there is no way of judging whether the team has been kept steadily at work or not, for though the proper extent of land has been gone over, it may have been but imperfectly harrowed, owing to the teamster giving too little lap. In plowing, rolling, cultivating, &c., it is easy to determine whether a [fair days' work has been done, but in harrowing such is not the case, for the reason above alluded to.



In the English harrow, figured above—manufactured by the Howards of Bedford—there is no necessity for letting the implement run on any portion of the land already gone over, as the harrow is so constructed, that the land on the sides is as thoroughly harrowed as in the center. Our whole system of harrowing needs a thorough investigation. The harrows are poorly constructed, and the work, in many cases, most absurdly performed. Let us consider "*why we harrow*," and the best means of accomplishing the object, and this important part of farm labor will be more efficiently performed.

## CUT WORMS AND DEEP PLOWING.

Your correspondent, F. G., in speaking of a successful corn crop says: "The sod turned in deep, the worms are kept below, working in the sod, until the corn has a good start. That is the theory, and it seems a successful one."

I am an earnest advocate of deep plowing, and practice it too, but I do not want any such reason as that assigned for it. It is true in neither fact nor "theory." The common destructive cut worm is hatched late in the autumn, living on tender shoots until the approach of late frosts, when it descends into the ground and there lies dormant until the approach of spring, when it ascends and commences its ravages. It always seeks and obtains its food

above ground at the period of its growth, in which it is destructive to crops, and if F. G. has any doubts he has only to examine the plants destroyed by the villains; and if he desires to see them at it, let him take a lantern and in the evening visit his crops which are being injured by them. They obtain their food nights and cloudy weather. If he turns them under deeply with the plow, they at once ascend to the surface in quest of food, as I have occasion to know to my loss. Last May I turned over an old pasture eight inches deep, and planted corn. On the 9th, 10th and 11th of June I was compelled to go through the entire field and kill cut worms, and plant over. I never saw a crop so badly injured. It took nine days work to replant ten acres.

If I had plowed the land late in the fall, after the young cut worms had housed themselves for a long sleep, the hard freezing of winter would have destroyed them; but turning them up to the sun in early spring served only to quicken their activity.—*Cor. Co. Gent.*

## A LARGE CROP OF TURNIPS.

IN THE *Genesee Farmer* for April 1862, Mr. John T. Andrews of West Cornwall, Ct., gave an account of a crop of ruta bagas raised by him the previous season, the yield of which, was, by actual measurement, 416½ bushels on a quarter of an acre, or 1666 bushels per acre. They were sown June 20th, on ridges 27 inches apart, and thinned out in the rows ten inches to a foot apart. The land had been very heavily manured, and in addition to this, after the ridges were made, a compost of hen droppings, night-soil, ashes, plaster, &c., was scattered in the ridges, which were then split with the plow, turning the soil back again and covering up the manure.

We mention the fact at this time, as we see a statement going the rounds of the papers, that Mr. Andrews has raised a crop of 2102 bushels per acre. We had supposed his former crop was one of the largest ever raised, but it would seem that he has beaten himself.

## A HOME MADE PORTABLE FENCE FOR THE GARDEN.

A correspondent of the *Boston Cultivator* says, that for several years he abandoned all attempts to cultivate strawberries because his hens and turkeys run at large, and strawberries were favorite eating for young turkeys; they picked all the ripe ones in a bed much sooner than he could, and the hens, to say nothing of the chickens, did likewise. Some eight years since, he made an attempt to overcome the difficulty, which was so successful that quite a number of his friends adopted the plan, which he describes as follows:

"On a rainy day, I set the men to sharpening one



end of several bundles of lathes, and when finished, I took two strips of inch board, one and one half inch wide, spread them about two and one half feet apart, and nailed on the lathes, the width of a lath apart, the strips being about twelve feet long; this gave me a moveable fence, which I tied up to stakes, driven into the ground. This fence I used to protect my vegetable beds when first planted in spring, and when the strawberries began to form, moved them to the strawberry beds. If the fowls were disposed to trouble the tomatoes after the strawberries were gone, I enclosed them with this portable fence; so that with a very small outlay at first, I furnished my family with strawberries, and sent many to market, having found the raising of this fruit a source of profit."

#### AFFECTION OF A DOG FOR A CAT.

WHILE traveling through the southern portion of New Hampshire, I stopped over night at the house of a friend, who is a sort of Jack-at-all-trades, doing a little farming, and doing it on modern, scientific principles—and from his few acres, cultivated on this plan, he reaps as large crops, and realizes as much net gain, as the man who cultivates twice the soil with but about half the *manure necessary to make it remunerative*. It is strange that farmers will expend so much hard labor, and get in return so meager pay. But to our story of the dog. This farmer owned a large black half Newfoundland dog, and a fine looking Malta cat, and he said they ate, played, and slept together. If he missed her, he would go around and whine in the most touching manner till he found her, and his joy was exhibited by fondling and caressing most fraternally. While the good woman of the house was preparing the supper, the cat and dog lay down together near the stove, and the tea-kettle began to boil over on the stove, with a spattering hiss. The dog sprang up and got out of harm's way; but the cat would not take the hint, and the noble dog would rush most up to her and whine, and then jump back. This did not answer, and with a vigorous spring he caught her by the neck and dragged her away. This affection for the cat, and cautiousness, challenges our warmest regard for brute instinct.

Tuftonborough, N. H., 1865.

J. L. HERSEY.

#### MANAGEMENT OF WORKING OXEN

It is not so much hard labor that heats oxen and makes them loll in warm weather, as the ill treatment of rough and abusive drivers. Treat them with gentleness when at work; feed them well and regularly three times a day, with cut hay and straw wet with water, sprinkled with oat and Indian corn meal, at least twelve quarts, besides some roots dai-

ly; let them have clean water as often as they are fed, and not require them to drink that which is impure, or stagnant; give them at least two hours after feeding to chew the cud and rest, and they will perform a vast amount of hard work, and increase in flesh at the same time, and will usually be found to be more convenient for many purposes than horses. Let it be reiterated that it is not the hard labor that oxen perform that exhausts their energies. Oxen were made for hard service; and if treated kindly and carefully, they will labor hard every day, and still grow fat. But when fed a stinted allowance of poor hay and meal, worried and abused by a bawling ill-natured driver, who incessantly applies the lash or goad, and dragged out by carrying on their necks a huge cart tongue, from morning till night, their strength fails, and sensible people are led to conclude that they cannot endure the heat like a horse.—*Agriculturist*.

#### REMEDY FOR KICKING COWS.

Cows, says a contemporary, seldom kick without some good reason for it. Teats are sometimes chapped or the udder tender, harsh handling hurts them, and they kick. Sometimes long and sharp finger nails cut their teats, and sometimes the milker pulls the long hairs on the udder, while milking. Shear off the long hairs, cut long finger nails close, bathe chapped teats with warm water, and grease them well with lard, and always treat a cow gently. She will never kick unless something hurts her, or she fears a repetition of former hurts. When handled gently, cows like to be milked. When treated otherwise, they will kick and hold up their milk. It is quite as consistent to whip a sick child to stop its crying, as to whip or kick a cow, to prevent her kicking while being milked.

#### SURFACE MANURING.

EDS. GENESEE FARMER: I am not surprised at your correspondent Buckeye being opposed to surface manuring. I would have been so myself, had not experience taught me better. I have used manure, only as a top dressing, for the last twenty-six years, and I do think one load used that way is worth far more than two plowed under on our stiff land.

I learned by experience, never to dispute any practice in farming until I had tried it. It was an able writer on pigeon-weed, more than 35 years ago, that cured me of self confidence. JOHN JOHNSTON.

COLORS OF PIGS.—"An absent member" of the Central Farmers' Club, writes to the papers to say that—"on reading over the 'pig debate' the question of *color* and capability of *bearing heat* seemed an undecided question. How was it that the learned ones did not remember that in Naples and Southern Italy, the hottest parts of Europe, black pigs only are to be found? At Gibraltar white pigs lose their tails and blacks do not.





## GARDEN WORK FOR JUNE.

JUNE is the month in which vegetation makes the most rapid growth. Heat and moisture, both of which generally abound in June, are two of the three principal agencies employed in vegetable growth, and as the sun is above the horizon more hours in June than any other month of the year, so light, the third agent, is more plentiful.

The chief business of the gardener during this month, is to apply a little stimulus to the growing plants, and to remove all obstructions to their growth. The stimulus may be applied in two ways—by the application of liquid manure, and by stirring the soil. The first is applying manure directly—the second indirectly. By stirring the soil, we not only manure it, but we also remove obstructions to the growth of plants. Weeds also obstruct the growth of vegetation, and should be promptly removed, by the hoe as far as possible, and by hand where the hoe cannot be used.

I have come to look upon all *respectable* weeds as a blessing rather than a curse, as they *compel* the gardener to stir the soil. I am hardly prepared to place quack-grass in the list of blessings, but its use may yet appear.

*Asparagus*.—It is well to cease cutting asparagus by the middle of June, (when green peas takes its place,) otherwise you may weaken its roots. It would be well then to give the bed a light dressing of fine manure, to enable it the better to prepare strong germs for the next year's crop.

*Beets*.—Sow the Long Blood still for winter. It is well to sow all seeds a little deeper than earlier in the season, as the surface dries out so quick under the hot sun.

*Cabbage and Cauliflower*.—Transplant the early part of the month for fall use, and the latter part for winter's. Hoe as soon as they get started, and keep hoeing every ten or twelve days until they begin to head. The early varieties may be sown this, to transplant next month into plats from which early vegetables have been removed. Two and a half feet each way is the proper distance to set the larger cabbages,—half that distance will answer for the smaller varieties.

*Carrots*.—Sow early the Long Orange, or the Long White, and later the Early Horn.

*Celery*.—May still be sown for winter supply. Those plants pricked out of the hot bed last month should be planted in trenches the latter part of the month,—the trenches four feet apart and one foot deep, made very rich and mellow. Set them eight or ten inches apart in the trenches, and shade them with boards for two or three days.

*Cucumbers*.—May be sown any time during the month for pickles.

*Sweet Corn*.—Plant at intervals through the month for succession. Hoe the early planted, cutting up the weeds, stirring the whole surface, but do not make much of a hill.

*Egg Plant*.—Transplant early in the month, and if sunny, shade for a day or two, and water.

*Melons*.—Hoe frequently, apply liquid manure, and be on the alert for bugs.

*Okra*.—May be planted the very first, and that planted last month thinned to one foot.

*Peas*.—Sow early sorts for late summer's use, and for seed, as the bugs will not infest the late sown. After the middle, the early varieties should be fit for the table. Do not pick them until the pods are filled, and do not tear the vines, as they will generally admit of two or three pickings.

*Parsnips*.—May be sown early in the month. A deep mellow soil is essential to produce long, straight roots, free from branches.

*Sweet Potatoes*.—The first half of June is the proper time for transplanting the sweet potato. It is very sensitive to cold, therefore should not be put out until all danger from cold winds as well as frost is past. A light, dry, sandy soil, is requisite to produce dry, fine-flavored tubers. If to be planted in hills, mark out the ground three feet each way, put a fork-full of stable manure to each hill, and raise a hill from ten to fifteen inches high, on which set a plant. The ground should be left hard *under* the hill, to make short, thick tubers. If to be planted in drills, mark one way three feet apart, scatter manure along the marks, and throw up ridges, on the top of which set the plants, eighteen inches apart. The Nansemond is the best variety to cultivate at the North.

*Rhubarb*.—Any surplus can be canned or bottled for the future. Allow no stalks to go to seed.

*Squash*.—The late varieties may be planted the very first of the month.

*Tomatoes*.—Good strong plants may yet be set. Hoe often, drawing a little dirt to the plants every time to support them.

## SMALL FRUITS.

With small fruits, we this month begin to *realize*.

*Currants*.—First appear upon the table in their



green state. Stewed, and well sweetened, they are excellent for sauce or pies. They ripen the latter part of the month, and should be gathered as soon as ripe for jelly, but are better for eating and table use when *dead* ripe.

*Raspberries and Blackberries*—Will show a disposition to throw up numerous shoots. All but half a dozen of the strongest should be destroyed.

*Grapes*—It will *pay* to go over the grapes once a week, and break off all the surplus shoots. It will impart strength and vigor to what remains, causing them to produce much larger and fairer fruit.

*Strawberries*.—Now is the time to regale on this most delicious of fruits. Give the vines a last hoeing, and when they commence ripening, mulch them. This will keep the berries clean, the ground cool and moist, thus prolonging the bearing season.

P. C. R.

### DWARF APPLE TREES.

THERE is a tendency in this country to separate fruit growing from ordinary gardening. Apples and peaches are mere farm crops, grown in fields on a large scale; and dwarf pears are frequently grown in orchards devoted entirely to this crop. Where fruit is grown for profit, the practice is undoubtedly a good one, from the increased facility afforded for the use of horse cultivation. But there is also a tendency to adopt the same system of planting in gardens and grounds kept for private use and pleasure, and where economy of labor is not the first consideration.

In private gardens of considerable extent, the practice may be a desirable one, but in the majority of cases, we think more pleasure is derived from laying out a "kitchen garden" in the old-fashioned way. We have known many pleasant gardens of this kind. There would be a gravel walk through the centre, and a cross-walk in the middle, and another one fifteen or twenty feet from the top, where, if a southern aspect, a nice border would be formed for early crops. If the garden was wide enough, there would be a walk also on each side, or at a little distance from the hedge, leaving a narrow border. On the sides of the walks there would be some espalier apple trees, of such varieties as the Keswick Codlin. Then how well the gooseberry and currant bushes looked trained on a single stem and thoroughly pruned. Strawberries can occupy some of the borders on the sides of the walks to great advantage, being especially convenient for picking. There are few things that look better along the walks than dwarf apple and pear trees. The latter, indeed, are frequently met with in gardens, planted along the walks, but dwarf apples are not so common, though equally appropriate. In fact, no gar-

den is perfect without them. If properly pruned, they need occupy but little space, and there is something very pleasant in seeing such large fruit on such small bushes. Those, too, who wish to become acquainted with a number of varieties can cultivate them in this way on a small space, and besides these dwarf trees come into bearing in less than half the time of ordinary trees.

Thomas Rivers, the well known English pomologist, in the twelfth edition of his "Miniature Fruit Garden," recently issued, has a new chapter on the culture of dwarf apple trees in market gardens for profit, some extracts from which, with a sketch of the trees, we transfer to our columns. We have our doubts as to whether dwarf apples can be profitably raised in this country as a market crop, but they should certainly find a place in every well kept garden. Mr. Rivers says:

"Our market gardeners, as a rule, are very deficient in their knowledge of fruit-tree culture, and they have much to learn. The usual practice with them is to plant standard or half standard trees in rows, some 20 or 30 feet apart, and between them gooseberry and currant trees. The ground is dug between the trees in spring deeply, and often carelessly. Nothing can be more barbarous, for the ground is so shaded that no surface roots can have the benefit of air and the heat of the sun; and if by any chance they could come to the surface, they are, as a matter of course, destroyed by the spade. It is true that in some of the rich market gardens near London, large quantities of fruit are grown in spite of the uncouth treatment the trees receive, but this does not alter the case.

"In a well-ordered fruit garden every kind of fruit should have its department, and instead of seeing, as in Kent, a row of trees of all sorts, mixed in the most heterogeneous manner, no mixture of species should be allowed; every kind should have its allotment—apples on the Paradise stock, ditto on the crab stock, pears on the quince stock, the same on the pear stock. Morello cherries as pyramids on the Mahaleb stock—the best of all methods for their culture—and the various kinds of Duke cherries on the same stock. Heart and Biggarreau cherries on the common cherry stock. Plums as bushes, pyramids or half standards, should all be separated, and not planted higgledy-piggledy, as they have been and are now. The sound-headed market gardener will, when his mind is turned to improved fruit-tree culture, see all this, and make his fruit garden a pattern of order.

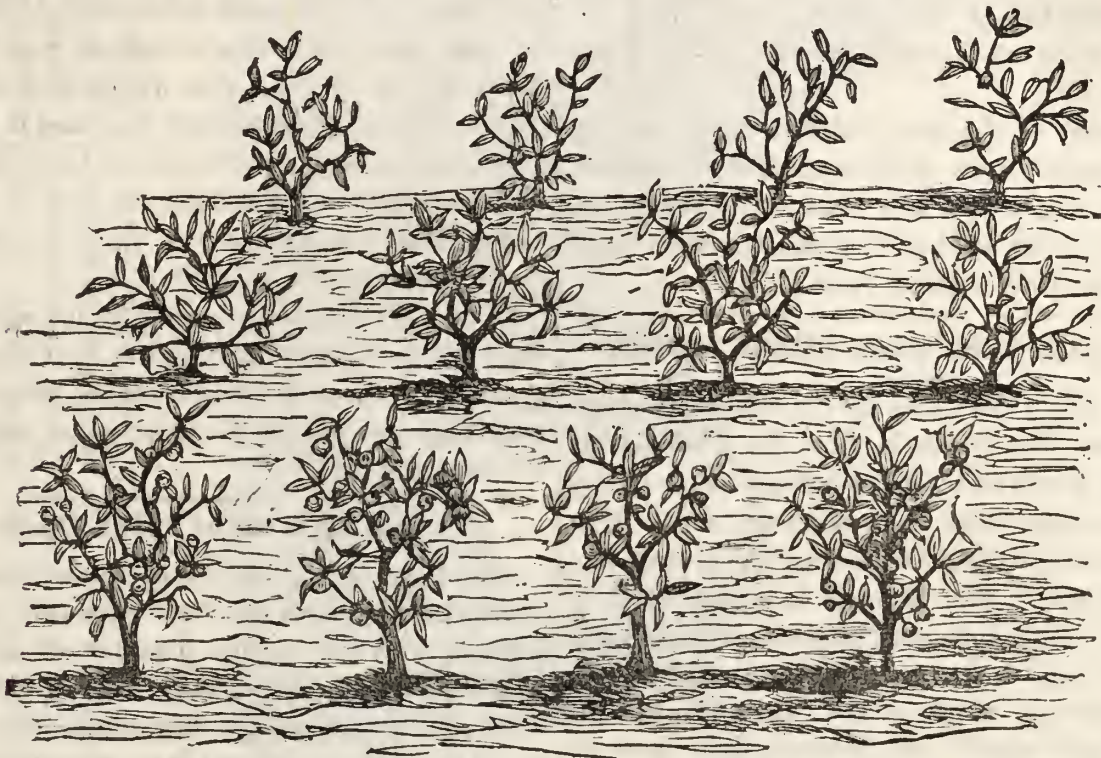
"I have been led into these remarks on market garden fruit-tree culture by my own experience, and especially into a consideration of the great improvement that may be made in the culture of apples on



the English Paradise stock. These trees will this season, the third of their growth in their present quarters, and the fourth of their age, give an average of a quarter of a peck from each tree, so that we might have, from 4,840 trees, growing on one acre of ground, 302 bushels of fine apples, which, even this abundant season (1864), would be (if Cox's Orange), worth 5s. per bushel, or £75. In 1866, the trees then averaging half a peck each, would be double this sum, and make an acre of apple trees a very agreeable and eligible investment.

"It may be by some made a question of expense, for although the return must be large and profitable, the purchase of 5,000 apple trees would involve a large outlay. To this I reply—first, that stocks

"It will be seen that what I propose is in reality a nursery orchard, which may be made to furnish fruit and trees for a considerable number of years. To fully comprehend this, we must suppose a rood [a quarter of an acre] of ground planted, as I have described, with 1,210 bush apple trees. In the course of eight or ten years half of these, or 605, may be removed to a fresh plantation, in which they may be planted six feet apart; they will at once occupy half an acre of ground. At the end of sixteen or eighteen years, every alternate row of trees in the first plantation, the rood, will require to be removed, which will give 302 trees to be planted six feet apart, leaving 303 in the original rood. The 1,210 trees will by this time occupy one acre of



costing only a small sum per thousand may be planted and grafted where the trees are to grow permanently; and, second, that a large demand, which my method of planting would create, will also create a cheap supply. The preparation of the ground should be as follows:—It should, previous to planting, be forked over to a depth of 20 inches; if very poor and exhausted, from 30 to 40 tons of manure may be forked in—not more, as trees such as I have recommended, viz., pears on the quince stock, and apples on the English Paradise stock, do not root deeply—this ought to cost £6 13s. 4d. The annual expenses are forking the surface in spring, £1 6s. 8d., and hoeing the ground, say four times during the summer, £1 4s. I give the amounts paid here for such work. Then comes the summer pinching of the shoots by a light-fingered, active youth, and this may at a guess be put down at £1, making the aggregate annual expenses £3 10s. 8d., or say £4. The large return will amply afford this outlay, even adding, as we ought to do, the interest on capital and rent.

ground at six feet apart. With proper summer-pruning or pinching they will not require any further change, but continue to grow and bear fruit as long as they are properly cultivated. The great advantage reaped by the planter is the constant productiveness of his trees; from the second year after planting they will be always 'paying their way.'

"The unprejudiced fruit-cultivator will quickly find out the great advantage of my mode of apple and pear cultivation.

"In the usual old-fashioned mode, standard apple trees are planted in orchards at 20 feet apart, or 108 trees to the acre. If the soil be good, and the trees properly planted, and the planter a healthy, middle-aged man, he may hope, at the end of his three-score and ten, to see his trees commencing to bear, and may die with the reflection that he has left a valuable orchard as a legacy to his children, but has not had much enjoyment of it during his life. Now, although, like most fathers, I have a strong wish to benefit my children, I hold the idea that one ought



also to think of one's own gratification; and so I plant trees, and recommend the planting of them, that will give me some satisfaction, yet leave a 'remnant' for my children.

"A French pomologist, who paid me a visit last year, said: "Ah! now I find an Englishman planting for himself as well as for his children;" and went on to say he was struck by seeing in England so many standard trees in market gardens, the planters of which could have derived but small benefit from them; and the apparent ignorance of fruit gardening as a lucrative occupation. This he, in fact, imputed to our climate, which, Frenchman-like, he thought totally unfit for fruit culture in the open air, yet felt much surprised to see here the produce of a well-cultivated English fruit garden, in a climate not nearly so favorable as the valley of the Thames.

"I have only to add that, besides my plantation of Cox's Orange Pippin, I have another of upwards of 400 trees, which has now been in existence upwards of ten years, so that I am not theorising, but deducing facts from a sound basis."

#### HOW TO MAKE THICK OSAGE ORANGE HEDGES.

It is very well known that the only difficulty about making good live fences is, that the tendency to grow thick at top and thin at bottom, is too strong to control without much labor and more skill. The whole object of intelligent trimming is to reverse this nature of things. The hedge is trimmed severely towards the top in June, just after the young shoots have grown, and before they have become woody, which somewhat weakens the upward growth; while the side shoots are encouraged to grow as strong as possible, without any, or very little trimming until the fall of the leaf, when pruning rather strenghtens than weakens the subsequent vegetation.

While traveling westward recently, we met an intelligent western farmer who had found live fences "no humbug;" but rather an invaluable blessing to the Prairie man. He spoke of his hedges, and those of his neighbors, who mostly followed his plan, as so thick and compact that a starved hog would hardly dare attempt to break through to a good feed of corn on the other side. He told us his plan. We have never seen any done after his system, but it is so reasonable, that we have full faith in the plan, and are sure our readers will find it to their interest to try what merit there may be in it.

The mode consists in nothing but this:—The hedge of course is cut down pretty low when first planted, and it shoots up, perhaps, two or three feet the first season. These are cut down to about nine inches the following winter; and the following spring

they push forth numerously, and with great vigor. About June or July they are cut square off about eighteen or twenty inches from the ground, and the prunings raked up and placed along *on the middle of the squared top, along the whole line of the hedge*. Here they in time wither and die, and of course shade the leaves and buds immediately beneath, which weakens their strong upward tendency more than the pruning of the green shoots would do; and the shoots turn, as it is well known they will do, to the strongest points of light, which in this case will be the sides. *The whole course of the shoots will be, in fact, towards the sides*, just where we find the usual difficulty is to make them grow.

He did not explain to us in this way how the plan operated; the explanation is our own. All he vouched for was, that the hedges so treated were thick and bushy at the bottom, just where thick and bushy branches are most desirable to be,—and it is so much in accordance with what we know to be the result in similar cases, that, simple as the idea is, we felt we had gained a great amount of valuable information for our diary of that single day.

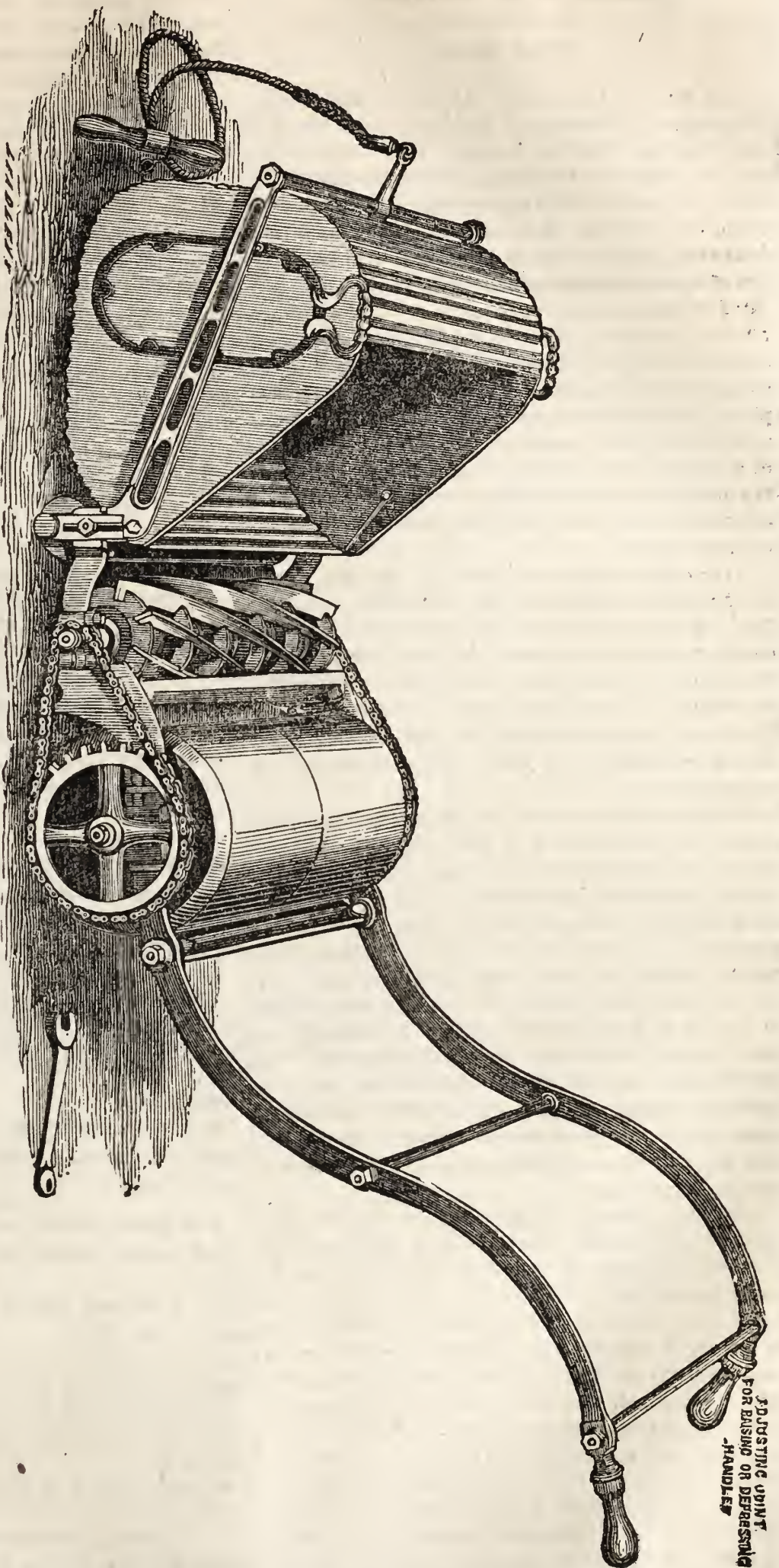
The square form of trimming is not continued beyond the first year's time,—after that the hedge is gradually reduced to a sort of conical shape; but the trimmings are laid on for some years afterwards.—*Gardeners Monthly*.

#### CATERPILLARS ON APPLE TREES.

The common tent caterpillars were abundant last year, and they have left their eggs very neatly and skilfully glued upon the branches of apple trees. Sharp-eyed boys or men may remove these clusters very readily and throw them upon the ground.—Small trees can be cleaned with comparatively little trouble, while the branches of a large tree that fills a circle of some thirty or more feet in diameter will require much more labor, and probably some will escape the most careful search.

These must be removed after they become "creeping things," which they will do as soon as the buds open. For many years a round brush attached to a pole has been very generally used to remove the nests of these insects. One great trouble with these brushes was that the bristles, especially after being wet with dew or rain, were not stiff enough to hold and wind up the web. Mr. J. S. Needham of Salem, Mass., has left at our office specimens of a brush made in the old form, but of iron wire, card fashion, which we think must obviate some of the objections urged against the old fashioned ones. Mr. Needham calls it the "Caterpillar Scourge." For the purpose of cleaning it when clogged with nests, each "Scourge" is furnished with a little iron toothed hand brush. We do not know the price, nor where they are to be had except of the patentee.—*N. E. Farmer*.





### LAWN MOWING MACHINES.

These are very common in England. We give a cut of one of the most popular kinds. They are made of all sizes, from a cut of ten inches, "suitable for a lady," to a 48 inch cut, worked by a horse. The price of the *lady* machine is £3 10: and from that up to £5, £6 and £8 for machines worked by hand according to size. The horse machines cost from £13 to £30.

Lawn machines are made in this country, and are used more extensively each year. Nothing looks more beautiful than a well kept lawn; and few things are more expensive. A good machine greatly lessens the expense, and we are sorry that the price now asked for them is so excessive. Were they made at rates corresponding with those above, they would soon be found in every garden of any pretensions.

The accompanying illustration will give an idea of the construction of the machine. It cuts the grass and the receptacle in part carries it off, so that we save not only the labor of mowing, but of removing the grass and raking or sweeping. The great secret of having a good lawn is frequent mowing. In the growing season of the year it would be well to mow at least once a week, and it is for this reason that the introduction of these machines is so desirable.



## Ladies' Department.

### LITTLE FOXES.

Mrs. Stowe's paper, in the *Atlantic* for May, has for its subject "Persistence," the fourth little fox that eats the grapes from the domestic vine. Like all the rest, it is most true to nature, and written charmingly. We give an extract from it, although it is difficult to make any selection, all is so perfect in its way. We wish every reader of the *Genesee Farmer* had the pleasure of seeing the entire article every month:

"The animal power of firmness is a brute force, a matter of brain and spinal cord, differing in different animals. The force by which a bulldog holds on to an antagonist, the persistence with which a mule will plant his four feet and set himself against blows and menaces, are good examples of the pure animal phase of a property which exists in human beings, and forms the foundation for that heroic endurance, for that perseverance, which carries on all the great and noble enterprises of life.

"The domestic fault we speak of is the wild, uncultured growth of this faculty, the instinctive action of firmness uncontrolled by reason or conscience,—in common parlance, the being "set in one's way." It is the animal instinct of being "set in one's way" which we mean by self-will or persistence; and in domestic life it does the more mischief from its working as an instinct, unwatched by reason and unchallenged by conscience.

"Now it is quite true that people may have a perfect agreement and sympathy in their higher intellectual nature,—may like the same books, quote the same poetry, agree in the same principles, be united in the same religion,—and nevertheless, when they come together in the simplest affair of everyday business, may find themselves jarring and impinging upon each other at every step, simply because there are to each person, in respect of daily personal habits and personal likes and dislikes, a thousand little individualities with which reason has nothing to do, which are not subjects for the use of logic, and to which they never think of applying the power of religion,—which can only be set down as the positive ultimate facts of existence with two people.

"Suppose a blue-jay courts and wins and weds a Baltimore oriole. During courtship there may have been delightfully sympathetic conversation on the charm of being free birds, the felicity of soaring in the blue summer air. Mr. Jay may have been all humility and all ecstasy in comparing the discordant screech of his own note with the warbling tenderness of Miss Oriole. But, once united, the two commence business relations. He is firmly convinced that a hole in a hollow tree is the only reasonable nest for a bird; she is positive that she should die there in a month of damp and rheumatism. She never heard of going to housekeeping in anything but a nice little pendulous bag swinging down from under the branches of a breezy elm; he is sure he should have water on the brain before sun-

mer was over, from constant vertigo, in such swaying, unsteady quarters,—he would be a sea-sick blue-jay on land, and he cannot think of it. She knows now he don't love her, or he never would think of shutting her up in an old mouldy hole picked out of rotten wood; and he knows she doesn't love him, or she never would want to make him uncomfortable all his days by tilting and swinging him about as no decent bird ought to be swung. Both are dead-set in their own way and opinion; and how is either to be convinced that the way which seemeth right unto the other is not best? Nature knows this, and therefore, in her feathered tribes, blue-jays do not mate with orioles; and so bird-housekeeping goes on in peace.

"But men and women as diverse in their physical tastes and habits as blue-jays and orioles are wooing and wedding every day, and coming to the business of nest-building, *alias* housekeeping, with predilections as violent, and as incapable of any logical defence, as the oriole's partiality for a swing-nest and the jay's preference of rotten wood."

DIRECTIONS FOR KNITTING SHETLAND VEILS.—Cast on 140 stitches, knit 6 plain rows.

1st row. Knit 5 stitches, knit 2 together. \*Thread forward, knit 1 thread forward, knit 2 together, knit 1, knit 2 together, repeat from \*, until within 5 stitches of the end, thread forward, knit the rest plain.

2d. Purl or seam across.

3d. Knit 6, \*thread forward, knit 3, thread forward, slip 1, knit 2 together, pass the slip over, repeat from \* until 6 remain, thread forward, knit 2 together, the rest plain.

4th. Purl.

5th. Knit 6, \*thread forward, knit 2 together, knit 1, knit 2 together, thread forward, knit 1, repeat from \* until 6 remain, thread forward, knit 2 together, the rest plain.

6th. Purl.

7th. Knit 5, knit 2 together, \*thread forward, slip 1, knit 2 together, pass the slip over, thread forward, knit 3, repeat from \* till 5 remain, thread forward, knit plain.

8th. Purl.

To be repeated until you get the required length, then to be finished with a crotchet border.—*Godey's Lady's Book*.

THE HISTORY IN SEVEN VERSES.—1. "She shall be called woman because she was taken out of man."—*Gen. ii. 23*.

2. "I will put enmity between thee and the woman."—*Gen. iii. 15*.

3. "Strength and honor are her clothing, and she shall rejoice in time to come."—*Proverbs, xxxi, 25*.

4. "Blessed art thou among women."—*Luke, i, 28*

5. "God sent forth His Son made of a woman."—*Gal. iv. 4*.

6. "The woman is the glory of the man."—*1 Cor. xi. 7*.

7. "A woman clothed with the sun, and the moon under her feet, and on her head a crown of twelve stars."



## Young People's Page.

### THE TEETOTAL CAT.

THE story I shall tell to you,  
You may depend is strictly true;  
So please to wait,  
While I relate  
The facts, and all particulars state.  
It is about a little boy,  
A pretty boy just four years old,  
His father's hope, his mother's joy—  
A Scottish laddie, stout and bold.  
His name was Donald, don't forget;  
He wore a bonnet, not a hat;  
And Donald had a darling pet,  
A fine, large, well-behaved tom-cat.  
Young Donald's father and his mother  
(He had no sister, nor a brother.)  
Had signed the temperance pledge; the three  
Were one teetotal family.  
But Donald said, "The cat makes four;  
He signed the pledge—I'll tell you how;  
I held a pencil in his paw,  
And, when he signed, he cried 'Me-ow.'"

The father was a workman, who  
Although not rich, yet was not poor;  
He was what folk call "well to do,"  
And occupied a second floor.

One morning Donald's father saw  
That when the cat came near to play,  
Then Donald cuffed his outstretched paw,  
And drove his playfellow away.

"Why what's the matter, Donald? Fie!  
Don't beat poor Tom; what has he done?  
Say! has he scratched you on the sly?  
Perhaps it only was in fun."

"No, father! he's a wicked cat;  
And I have done with him—that's flat."  
"What has he done? Explain, my dear;  
You are too hasty now, I fear."

"No, father! I just served him right;  
He is a most deceitful cat;  
He little thinks I know; last night  
He broke his pledge, sir, think of that!  
So sly he crept away, last night,  
Down stairs, as quiet as a mouse;  
I saw him, by the bright gas-light,  
Go over to the public house."

"But cats don't drink;  
Sure you can't think  
Tom went to get a little drop.  
It's a mistake—  
Tom did not break  
His pledge by entering the shop."

"Well, father, I  
Can't pass it by;  
We can not be the friends we were;  
For you'll agree  
I'm sure, with me,  
Teetotalers have no business there."

### THE LAME SHEEP.

LITTLE Agnes and Elsie were wandering over the moors one day, and passed a flock of sheep and lambs running along, and stopping to nibble at the grass and heather. They watched them, and saw the shepherd following them with his crook in his hand. Every now and then he called out to one who lagged behind.

After awhile the little girls went on, and by-and-by came to a tall old post, by the side of which stood, pitifully bleating, an old sheep. Aggie went toward her, and the animal looked up, imploring with her meek eyes, as if to ask her help.

The children talked to her, and patted her woolly back, but she would not stir. Soon they heard a voice behind them; and turning round, saw the shepherd

himself. The sheep ba-a-d, and lifted up one foot, and Elsie and Aggie then saw a large thorn in it. Tenderly and skillfully it was removed, and the poor wounded foot bathed with water, and then, crook in hand, the shepherd walked away, calling, in a gentle voice, the sheep's name. And it slowly, but steadily, limped along, and followed him, until both were out of sight.

"Elsie, wasn't that a good, kind shepherd, to come clear way back for the sheep?"

"Yes," said Elsie.

"And Elsie," pursued Aggie, "didn't it remind you of the verse mamma taught us about Jesus, the Good Shepherd?"

"What verse, Aggie? I don't remember."

"Oh, you must," said Aggie. "'I am the good shepherd, and know my sheep, and am known of mine.' Jesus is our shepherd, Elsie, and we are His little lambs."

MADGE.

WAKING GRANDMA WITH A KISS.—A sweet little incident is related by a writer. She says:—I asked a little boy last evening—

"Have you called your grandma to tea?"

"Yes. When I went in to call her she was asleep, and I didn't know how to waken her. I didn't wish to *holler* at grandma, nor to *shake* her; so I kissed her cheek, and *that* woke her very softly. Then I ran into the hall, and said, pretty loud, 'Grandma, tea is ready.' And she never knew what woke her."

Do we find anything more sweet, delicate and lovely than this in the annals of poetry? Can conventional-ity improve upon such politeness, spontaneous in the heart of a six-years' boy?

WHY HE COULDN'T.—I read lately of a boy, you may name him John if you like, who ran into the house one evening and said:

"Mother, Willie played truant this afternoon, and he wanted me to go too, but I couldn't."

"*Couldn't?* why not, my son?"

"Because," said little John, throwing his arms most lovingly around his mother's neck, "I thought it would make you so sorry, and that is why I couldn't."

### A PUZZLE.

Taken as I am, I'm a dignified dame;  
Behead me,—an ancient old gent.  
Behead me again,—an obstruction I name.  
My head off again,—I'm what I consent  
To say of myself, though no other may  
Of me such a thing with propriety say.  
My head off once more, and, strange though it be  
A multitude yet remaineth of me!  
A strange monster I.  
All these wonders still  
Prove true, take these heads  
From which end you will.—*Our Young Folks.*

Answer next month.

A CLERGYMAN, catechising the youth of his church, put the first question from a catechism to a girl: "What is your consolation in life and death?" The girl smiled, but did not answer. The clergyman insisted. "Well, then," said she, "since I must tell, it is a young printer named P—, in Spruce street."





### Half Volume of the Genesee Farmer.

WE hope our readers will say a good word for the *Genesee Farmer* to their friends and neighbors, and remind those who do not take it that *now* is a good time to give it a trial for six months. We are determined from this day forward to make the *Genesee Farmer* a better paper than it has ever been. We shall keep the subscription price at one dollar a year, and endeavor earnestly to make it worth two dollars to any intelligent farmer. Agriculture will for the future occupy a very different position in this country than in the past. We have not now space to give our reasons for this opinion, but we shall witness great changes in our system of farming—and changes for the better. Agriculture is now becoming popular, not to say fashionable. It will attract more capital and intelligence. We shall use more artificial manures, raise better cattle and sheep and pigs, underdrain, introduce better implements and machines, and gradually enlarge the size of our farms. We possess the finest country in the world, and have the fullest opportunity for the exercise of all the mental and physical energy for which the American people are pre-eminently distinguished. Manufactures will flourish, emigration will continue, and agriculture, as the basis of our wealth and the mainstay of the nation, will advance as never before. Agricultural literature must advance also. It is now a disgrace to us. We speak advisedly. There are exceptions, but the majority of our agricultural books and periodicals are a disgrace to the intelligence of American farmers. Three-fourths of the so-called agricultural journals are nothing more nor less than “family papers.” We say nothing against them. They are useful in their way, but they do not meet the necessities of an intelligent farmer.

It is from such considerations as these that we have determined to enhance the value of the *Genesee Farmer*. Many of our friends ask us to make it more acceptable to the “women folks.” We should be most happy to comply. But our aim is to make a useful agricultural and horticultural journal, and we have not much respect for a farmer’s wife or a farmer’s daughter who does not take an interest in the operations of the farm, and who is not, therefore, more or less interested in the discussions of important agricultural topics. Of course they need other papers and books than those purely agricultural, and that family is to be pitied who depends on any one paper for its reading.

We propose, therefore, to keep up the price of the *Farmer* to one dollar a year—and to make it worth it.

Now, kind reader, if you know of a farmer or horticulturist who does not take the *Farmer*, will you not oblige us by asking him to try it for the coming six months? For club terms, premiums, &c., see last page.

### The Markets.

THE wheat crop in this section has not looked so well for many years. The season is fully two weeks earlier than last year, and though there has been a little too much rain, the spring crops were put in in good condition. Potatoes and corn are nearly all planted, and will soon be ready for the cultivator and hoe. The prospects of an abundant harvest are quite cheering.

In regard to the future range of prices, there is much speculation and great uncertainty. It seems almost impossible, that with such a gigantic war raging for the last four years, with the abstraction of so much labor from our broad fields, that there should not be a falling off in the amount of agricultural products. Before the war, we sometimes ran closer to a deficiency than is generally supposed. Thus the last census shows that the wheat crop of 1859 was 173,104,924 bushels, and the total exportation to Great Britain that year was only 205,248 bushels. In other words, for each one thousand bushels that we produced, we exported less than two bushels. The price of the thousand bushels was determined by the price of the two bushels in England. A very slight falling off in the crop would have given us a price determined, not by the price at which wheat sells in England, but by the price at which it could be brought to this country.

Should a demand spring up from the South, and should it turn out that, tempted by high prices, we have been exporting more than we could well spare, it may be found that we shall need all the grain of the present harvest. Should this be the case, prices will be high. Within the last few days, owing, it is said to an actual demand for shipment to Europe, gold has advanced from 125 to 138. Our imports are still quite large, and if our exports should fall off, as in the case supposed, we should be compelled to pay for them in gold rather than in grain. This would keep up the price of gold, and consequently of all other articles.

On the other hand, should we be able to export freely, there will be less demand for gold, and the price of our produce, being regulated by what it will bring in Europe, will rule low, especially in the West.

Prices have stiffened considerably in England within the last few weeks. Wheat has been so low (\$1.20 per bushel) for a year past, while turnips and other animal foods have been so scarce, that an enormous amount of wheat has been fed to cattle. So much so, indeed, that there are those who fear that there will be an actual scarcity of wheat before the next crop comes to market.

Wool in England has advanced from the low rate ruling a few weeks since. Trade has improved, and should the improvement continue, there will be a still further advance. Manufacturers, there as here, however, are only buying to supply immediate wants. Owing to the immense stock of sheep in this country it is not probable that we shall get as much for our wool as last year. We notice that the Ohio Wool Growers’ Association, at their recent Sheep Show at Newark, resolved to hold their wool at 85 cents, though



one of the members thought 75 to 80 cents would be nearer the mark.

Potatoes have been very low in this city. Flukes and Prince Alberts have sold at \$1.00 per barrel, and Peach blows at \$1.12. The market, however, has improved a little within a few days.

Hay still continues high, say from \$14 to \$22 per ton. Mill-feed, which a month ago was selling from \$35 to \$40 per ton, can now be bought for \$25.

Butter brings 30 cents per lb. Eggs 20 to 22 cents per dozen.

### New Advertisements.

We take pleasure in calling attention to the advertisements in the *Farmer*. We read them ourselves with much interest, and believe that few can do so without hearing of something that will be of value to him.

Among those this month which are particularly seasonable will be found the following:

J. M. Thorburn & Co., of New York, offer to send Turnip seed of the best varieties by mail, post paid, at from 75c. to \$1 00 per lb; with one or two new kinds at higher rates. They will also send Long Orange Carrot seed at \$1 50 per lb. This is a valuable variety for stock and can be sown this month with advantage. We need not say that there are no more respectable and reliable seedsmen in the United States than Messrs. T. & Co.

Pitts & Bralley of the Rochester Agricultural works, call attention to their Horse hoe, or Cultivator plow. It was first noticed in the *Farmer* in 1852, and since then has been introduced into all sections of the country, and gives great satisfaction. This agricultural establishment is a credit to Rochester, as well as a great advantage to the farmers of western New York. Mr. Gordon, who has had charge of it for many years, is a practical mechanic, and turns out none but the best made articles. Give him a call, or send for one of their circulars.

R. & M. Harder of Cobleskill, N. Y., advertise the "Best Threshing Machine in America."

Silas C. Herring of New York, again calls attention to Bullard's Hay Tedder. It is a valuable machine especially to those who have crops of heavy grass. It works admirably.

Horace L. Emery, who has been in Europe for a few years past introducing his cotton gin, has returned home and is carrying on the well known and extensive Albany Agricultural Works. He is one of the most skillful mechanics in the United States.

Messrs. Wheeler, Melick & Co., proprietors of the New York State Agricultural Works, call attention to their justly celebrated Railroad and Lever Horse Powers and Threshing Machines, as well as their valuable Horse Fork for unloading hay. They will send circulars containing descriptions and prices of their various implements and machines on application.

### Beets vs. Sorghum for Sugar.

OUR esteemed correspondent S. W., in a private note, writes:—"I am surprised that you should give sugar beets the preference to sorghum as a sugar making plant. Beets may be the best in Europe, where land is dear and labor cheap, but not in this country, particularly in the Great West."

That sugar of the best quality can be made from beets, is a well ascertained fact. There is no necessity for experimenting on this point. But with sorghum it is still an open question whether sugar can be profitably made from it. It is grown to a great extent in the West for the manufacture of molasses, but it is seldom that sugar is made from it except in very small quantities.

There are, aside from the fact that there is no uncertainty in the business, two reasons why we prefer beets to sorghum. The cultivation of beets, and the consumption of the refuse by cattle, *enriches the farm*. This is well known in Europe, and has given rise to the remark, "The more beets the more grain." Then there is this additional reason in favor of the beet. Sorghum must be worked up at the proper time in the autumn, or there is great danger of loss from chemical changes in the sap, but this is not the case with the beets; they can be kept all winter if need be, and can be worked up when most convenient.

### The State Sheep Show.

We had not time to attend the Sheep Show at Canandaigua, but learn that there was a fine exhibition of "American Merinos" and a very poor one of all other classes. We do not feel much interest in the "gastar" sheep, and shall not waste our space in giving the premiums. We understand that some of them changed hands at high figures.

The most useful feature of the show was a sheep shearing. The sheep and fleeces were weighed, and the wool has been reserved to be cleansed. When we get the weight of cleansed wool, we will give a full account of the weight of the sheep, the weight of the fleeces as shorn, and the weight of cleansed wool. This will be valuable information, and Mr. Moore is entitled to credit for offering the prize which called it out.

### Put up the Wool with more Care.

Those who only half wash their sheep, and keep them afterwards where they will get the most dirt, and then tie up the wool with heavy tarred twine may *think* that they can sell this dirt and string for the price of good wool—and may succeed in doing so once, but in the end they will certainly lose by the practice. In this, as in other things, honesty is the best policy. A wool buyer in Michigan, states in a letter to Sanford Howard, and published in the *Western Rural*, that he knows many farmers who have now their wool on hand that cannot be sold for more than 70 cents per lb, that he would have paid a dollar for last season, had it not been for the tarred rope.

THE RED RUSSIAN HOG.—This is to us a new breed. It is advertised in this number of the *Farmer*, by Mr. D. Cutts Nye, of Lexington, Mass. Mr. N. writes:—"This breed of swine is noted for small bone, ears, head and legs, and for being very broad-shouldered, round and compact, and being quiet and easily kept. The color is sometimes red, or red and white; while some are pure white. The Red Russian makes an admirable cross with other breeds. I have bred the Chesters for years, and have given them up for the Russians, as they are a much handsomer and finer hog in every respect."

SOW CORN FODDER.—The weather wiseacres say this will be the hottest summer in ten years. We believe they know nothing about it. But one thing is certain, that a good supply of corn fodder will prove valuable for milch cows next fall, when the pastures begin to fail. Now is the time to *drill* it in, say at the rate of two bushels per acre. Do not sow it broadcast. Drill it in rows and cultivate it.



## Inquiries and Answers.

**SOWING PLASTER.**—You would oblige me much by giving directions for sowing gypsum.—L. G. HOWARD, Fredonia, N. Y.

Plaster is usually carried in a sack or pail, and sowed broadcast by hand. It can be done more expeditiously by placing a tub or half-barrel in the hind end of a wagon, with a boy to drive by stakes. A man in the wagon, riding backwards, throws out two handfuls at a time, throwing cross-handed, and covering seven or eight yards. From one to two bushels per acre, on clover, is the usual quantity.

**COW NOT CLEANING AFTER CALVING.**—(YOUNG FARMER.)—Keep the cow warm and comfortable. The general cause of the difficulty is exposure to cold, wet storms. Give the cow some warm bran mash three times a day, and if necessary, give a drench of one pound of Glauber or half a pound of Epsom salts, two or three ounces of ginger, and a pound of molasses. If you could give her a quart of warm ale, instead of the molasses, it would be better.

**PARSNEPS.**—Are parsneps good for milch cows in the spring?—J. W.

Yes, excellent. Nothing better. They will pay to raise for this purpose. They have one advantage over carrots, that they can be allowed to remain in the ground all winter.

## ADVERTISEMENTS.

A FEW short advertisements of interest to farmers—and only such—will be inserted in the GENESEE FARMER at twenty-five cents a line, or \$2.50 per square, or \$25 per column, each insertion, payable in advance.

## TO FARMERS!

**BRADLEY'S TOBACCO FERTILIZER, AND BRADLEY'S** X L Superphosphate of Lime, are for sale at wholesale and retail by the Manufacturer. WM. L. BRADLEY:

Sales Office 24 Broad street, Boston.

Pamphlets containing testimonials in favor of his Tobacco Fertilizer, Bradley's X L Manual on the Culture and Curing of Tobacco, with Illustrations, can be had by addressing the undersigned. WM. L. BRADLEY.

Highest Cash prices paid for Bones. my

## SAWING MACHINES.

**WE** are building a GREATLY IMPROVED CROSS-CUT SAWING MACHINE for cutting logs into stove wood, with two or four horse powers to drive them.

Also, a new style CIRCULAR SAW for cutting cord wood into stove wood.

Circulars describing our machinery sent promptly on application by letter. Write to JONAS W. YEO, my4t Proprietor Robinson Machine Works, Richmond, Ind.

Sheffield Scientific School of Yale College.

**COURSES OF AGRICULTURAL INSTRUCTION**—Including the Practice of Agriculture and Horticulture, Agricultural Chemistry and Physiology, Principles of Breeding and Feeding, Injurious Insects, Rural Economy, Forestry, French and German Languages, &c.,—

Open September 13th, 1865.

For detailed Programme, apply to ju4t PROF. GEO. J. BRUSH, New Haven, Conn.

**THE BEST AND CHEAPEST FARMING LANDS IN THE WHOLE WEST, ARE THOSE OF NORTHERN MISSOURI.**

**REBELS** are moving away, and are selling for whatever they can get. An extensive immigration from the Northern States and from Europe already begun, will soon occupy that part of the State and develop its immense natural wealth. Free and full information given on application to

nov'64-ly ELI THAYER, 1 Park Place, New York.

## Sheep Wash Tobacco

I hereby certify, that I have been familiar with all the processes employed by the South Down Company in the manufacture of their "Sheep Wash Tobacco," and that the article prepared under Mr. Jaques' Patent contains all the useful principles of the Tobacco in a concentrated form.

This Paste, employed as a Sheep Wash, according to the directions furnished by the Company, has the effect of curing Scab and other cutaneous diseases, and destroying all parasitic insects which infest the skin and wool of the Sheep, and thereby improves the health of the animal, as well as the quality of its fleece. Employed in the same way, the solution being made stronger, it will destroy those insects which infest the skins of larger animals, and also those that are injurious to vegetation.

CHARLES T. JACKSON, M. D.,

Assayer to the State of Massachusetts, and Consulting Chemist.

Wool Growers should beware of any preparation that contains "sulphur," as it is sure to destroy the fibre of the wool. One pound of *Extract Tobacco* will make twelve gallons Wash, and contains the strength of eight pounds of Tobacco, as prepared by farmers.

**Agents wanted in every Wool District.**

JAMES F. LEVIN, Agent South Down Co., 23 Central Wharf, Boston.

\*\* Farmers, preserve this advertisement, and ask your storekeepers to keep the Wash for sale. A liberal discount to the retailers. feb9t

## BASS BARK.

**WE CAN FURNISH BASS BARK, PREPARED** for budding, of excellent quality, for 80 cents per lb., or \$25 per 100 lbs. Cash orders solicited.

THOMAS & HERENDEN, Macedon, Wayne Co., N. Y.

ju2t

## Fresh Turnip Seed by Mail.

**THE NEW SWEET GERMAN TURNIP** is incomparably the best for winter use or late keeping. Seeds prepaid by mail to any part of the country. A priced list of above, and all other desirable turnips, with directions, will be sent gratis to any address, by return of mail.

B. M. WATSON, Old Colony Nurseries, Plymouth, Mass.

ju

## STRAWBERRY BOXES.

**20,000 ROUND QUART STRAWBERRY** Boxes, well made and substantial, at \$50 per 1,000. I will send samples, crated up, at \$4.25 per 100. Address C. VANDERBRUGH, 83 Main Street, Rochester, N. Y.

ju

## Old Eyes Made New

WITHOUT SPECTACLES, DOCTOR OR MEDICINE.

Pamphlet mailed free on receipt of ten cents. Address E. B. FOOTE, M. D., No. 1130 Broadway, New York. ju 4t

**SUPERIOR FARM LAND!—20,000 ACRES AT LOW PRICES AND ACCOMMODATING TERMS.**—Franklinville Tract, Gloucester county, New Jersey, 25 miles south of Philadelphia on railroad running from Philadelphia and Camden to Cape May. In lots to suit purchasers. Circulars, with reports of SOLON ROBINSON, Hon. WM. PARRY, and others, with full information, sent free, by addressing JOHN H. COFFIN & CO., Franklinville, Gloucester county, New Jersey. Also, improved Farms from 20 acres upward. ap6t

## TILE MACHINE.

**THE BEST MACHINE IN AMERICA.** Send for a Circular containing description. A. LA. TOURETTE, Waterloo, N. Y. ap65tf

**FOR SALE.**—A very superior Red Russian Boar, 18 mos. old, weighing about 250 lbs. Price, if applied for soon, boxed and delivered in Boston, with feed \$40. Address ju1t D. CUTTS NYE, Lexington, Mass.

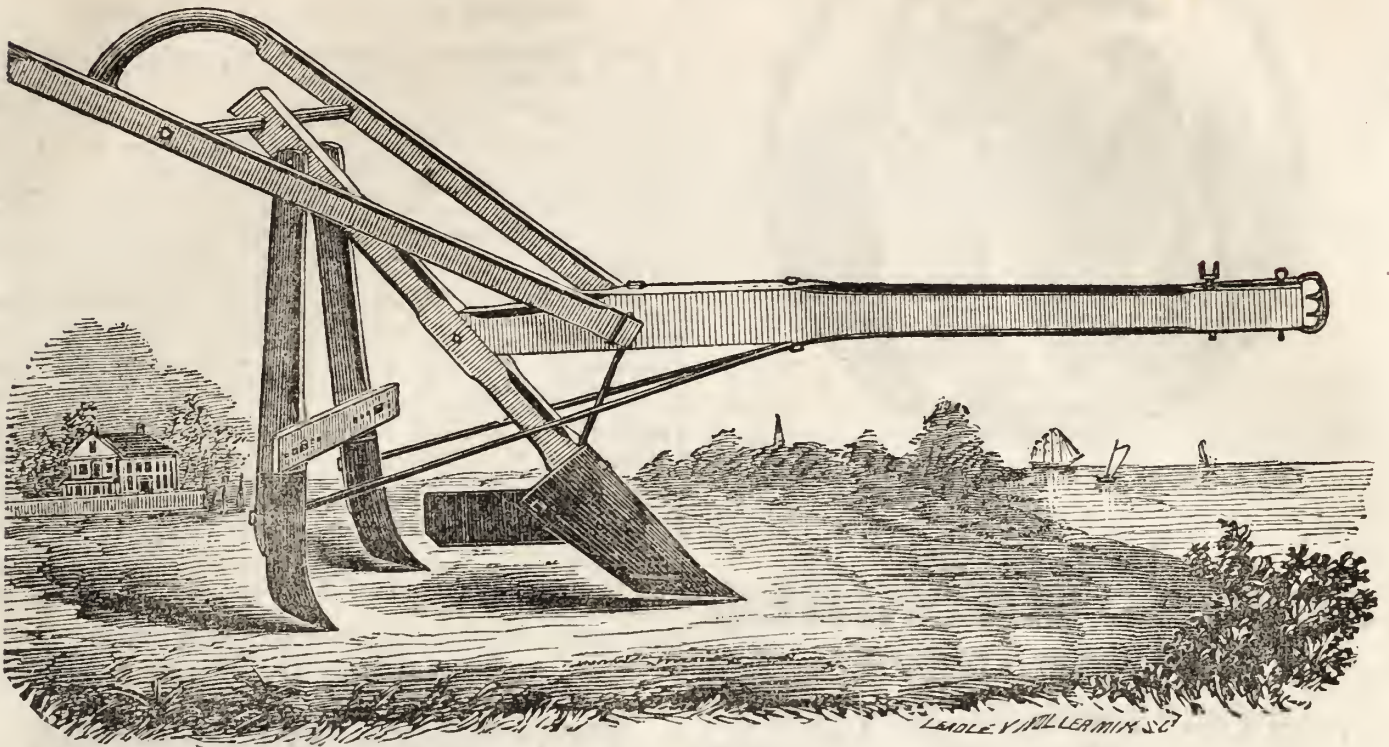
**\$70 A MONTH!**—I want Agents everywhere, at \$70 a Month, expenses paid, to sell Fifteen Articles, the best selling ever offered. Full particulars free. Address OTIS T. GAREY, Biddeford, Maine. ju 3t



## ROCHESTER AGRICULTURAL WORKS.

PITTS &amp; BRAYLEY, Proprietors.

68 South St. Paul Street, Rochester, N. Y.



## HYDE &amp; WRIGHT'S HORSE HOE OR CULTIVATOR PLOW.

The following are some of the advantages this Cultivator has over every other kind now in use:

1st. Lightness and durability, being made of the best quality of steel, highly polished, and the whole implement weighing from 50 to 60 lbs.

2d. Adaptation to more kinds of work than any other Cultivator known; being a perfect and thorough Cultivator when used with all the teeth on, leaving the ground even and level, and working nearer the rows than any other Cultivator.

3d. By removing the small teeth, and attaching the wings to the shovel, it is the most perfect implement for hilling that can be found.

4th. It is the best implement for covering and digging potatoes ever invented. A man and horse can cover potatoes as fast as a

horse can walk, and a man and team can dig from 300 to 500 bushels of potatoes in a day, when the crop is a fair one.

5th. It works equally well in corn, or any kind of crop requiring cultivating, and in most cases hand hoeing can be dispensed with.

6th. Its cheapness, considering the many kinds of work to which it can be applied; the farmer having in our implement all that is necessary for cultivating and hilling any kind of crop, or covering and digging potatoes.

Numberless certificates from the most influential farmers in the United States might be given, of the superiority of the above implement over all others designed for like purposes. But as the Horse-Hoe is so well known, we deem it unnecessary to publish them.

## Corn and Bean Planter Combined.

WE are manufacturing one of the most successful Two-Rowed Planters now in use. One man and horse can plant either in rows or checks from 10 to 12 acres per day, and do the work well. The machine is easily managed, and is of light draft for one horse. It is one of the greatest labor-saving machines of modern invention. Patented August 14th, 1860.

The demand for this Planter has continued to increase, until scores of them are now in use in Western New York, Michigan and Canada West.

Cash price at the Factory, \$25.00, subject to alteration as stock and labor may require.

Please order early. Several orders came too late last year to be filled.

Orders with cash will receive prompt attention. A liberal discount made to merchants and agents.

For further description, send for circular.

ap WHITESIDE, BARNETT & CO., Brockport, N. Y.

## TURNIP CULTURE.

**Rhodes' the Standard Superphosphate,  
CANNOT BE EXCELLED  
FOR THIS IMPORTANT CROP.**

B. M. RHODES, & CO., 82 South street, Baltimore.  
H. B. MORING, General Agent New York and New England,  
my3t 113 Water street, New York.

## American Roofing Company.

## GREEN'S PATENT.

THIS COMPANY is now prepared to furnish one of the best articles of ROOFING ever introduced, consisting of a STOUT MATERIAL made WATER-PROOF by a COMPOUND of INDIA RUBBER, hardened by a coat of METALLIC PAINT, prepared expressly.

The WHOLE FABRIC has been thoroughly tested, is WATER PROOF, and unaffected by changes of weather.

It rolls up and unrolls like a piece of Oil Cloth.

It is designed for covering RAILWAY CARS, STEAMBOATS, DWELLINGS, BARNs and SHEDS. It can be laid down by any sensible working man.

It is cheaper than any known roofing of equal durability.

It can be seen in use and samples had by applying at the Office of the Company, No. 94 WALL STREET, NEW YORK.

ap3t

HENRY SMITH, Agent.

**THE CLIPPER ONE-HORSE MOWER—**  
Adapted to every variety of surface and to cutting every kind of grass.

This machine is capable of cutting three-fourths to one acre of the heaviest grass per hour, and can be drawn as easily by one horse as ordinary two-horse mowers by two horses.

The height of cut can be varied by the driver while the machine is in motion, and without leaving his seat. It is simple, durable, and not likely to get out of order.

Two-Horse Mowers and Combined Machines of the same pattern.

ap3t

R. H. ALLEN & CO.,

189 and 191 Water street, New York.



## GROVER & BAKER'S HIGHEST PREMIUM



## ELASTIC STITCH AND LOCK STITCH SEWING MACHINES,

feb 495 Broadway, New York. tf

## SUPERPHOSPHATE OF LIME, BONE DUST AND MEAT AND BONE COMPOST.

MANUFACTURED BY

### TASKER & CLARK,

Cor. 8th and Washington Sts., Philadelphia.

THE manufacturers offer their Superphosphate to the public confident that it will be found equal to any similar article now in the market. Being made from finely ground bones (not burned), Peruvian guano, and other ingredients having manurial properties, it has been found a superior fertilizer for wheat, grass, &c., &c. Price \$65.00 per tun at the factory.

MEAT AND BONE COMPOST.—A valuable manure from refuse meat, bones and other offal from the slaughter-house. Price \$40 per tun.

BONE DUST—Very fine and pure at \$65.00 per tun.

Terms Cash. Address as above,  
feb7t TASKER & CLARK, Philadelphia, Pa.

## NEW ILLUSTRATED CATALOGUE. ROCHESTER CENTRAL NURSERIES.

SEND FOR A CATALOGUE  
AND  
SPECIAL TERMS OF SALE,  
AND  
ORDER YOUR TREES DIRECT.

Address C. W. SEELYE,  
ap1f 'Rochester Central Nurseries, Rochester, N. Y.

## BEECHER'S PATENT VENEER FRUIT BASKET.

AFTER one season's thorough trial of the VENEER FRUIT BASKET, we offer it to the trade with the full assurance that nothing of the basket line now in market can compete with it in its adaptability to the wants of fruit-growers. For durability and style our Basket has no superior, and for strength and cheapness no equal.

For circulars of description, &c., address  
feb6t A. BEECHER & SONS, Westville, Conn.

"RHODES"—THE STANDARD MANURE for Tobacco, Corn, Oats, &c.; also, Top-dressing for the growing Wheat. Our spring supply of this long-established Manure ready for delivery.

Office 82 South street, Bawly's Wharf, Baltimore.  
Or, H. E. MORING, General Agent for New York and New  
mb4t England, 118 Water street, near Wall, New York.

## ALBANY

Agricultural Warehouse & Seed Store,  
Nos. 14 & 16 Green Street, Ground Floor,  
NEAR CORNER OF STATE STREET,  
Albany, N. Y.,

HORACE L. EMERY, Sole Proprietor.

THE subscriber takes pleasure in announcing that after an absence from the city and country of nearly two years, he has returned and assumed the entire interest in and to the Stock, Business and Interests of the ALBANY AGRICULTURAL WORKS, situated on Hamilton, Liberty and Union Streets, and also of the AGRICULTURAL WAREHOUSE AND SEED STORE on State Street, and continues the business of the same solely upon his individual account and management. He has greatly improved and increased his facilities for manufacturing, and is better than ever prepared to supply all articles in his line, of a superior quality and upon the most reasonable terms.

He has also REMOVED the entire Stock and Fixtures of the WAREHOUSE AND SEED STORE from the old stand in State Street, up stairs, to Nos. 14 & 16 GREEN STREET, and replenished the stock of Implements and Seeds, with the best of its kind, all of which he offers to the public upon the most reasonable terms.

Having been the pioneer in the business of introducing, manufacturing and selling of improved Agricultural Machinery and Implements and Seeds in this city, and devoted twenty years here to the business, he solicits a continuance of the liberal patronage heretofore enjoyed by him and his successors in these Works and business.

HORACE L. EMERY,  
Sole Proprietor and Manager of the Albany Agricultural Works, Warehouse and Seed Store, Hamilton, corner Liberty and Union streets, and Nos. 14 and 16 Green street, near corner State street, Albany, N. Y.

ju 2t

## The Best Railway

## THRESHING MACHINE

IN AMERICA.

THE Horse Power that is unequalled for ease of team, amount of power, and has never failed to take the

First Premium Over All Its Competitors, wherever tested. The Combined Thresher and Cleaner that  
CLEANS EQUAL TO ANY FANNING MILL,  
fit for mill or market.

THRESHERS, SEPARATORS,  
Fanning Mills, Wood Saws,  
Seed Sowers, Planters, &c.

All of the best in market. Send in orders early, as we are governed by "first come, first served."

For price and description send for Circulars, and satisfy yourself before purchasing.  
R. & M. HARDER,  
ju 2t Cobleskill, Schoharie Co., N. Y.

## "Cayuga Chief Mower and Reaper,"

WITH

"YOUNG'S IMPROVEMENTS,"  
FOR 1865.

Manufactured ONLY by

BARBER, SHELDON & CO.,  
Auburn, N. Y.

Examine closely before buying, as there are others building the Cayuga Chief without "YOUNG'S IMPROVEMENTS."

Send for Descriptive Pamphlet.  
ap4t BARBER, SHELDON & CO., Auburn, N. Y.

\$125 A MONTH!—Agents wanted everywhere to introduce the improved Shaw & Clark \$20 Family Sewing Machine, the only low price machine in the country which is licensed by Grover & Baker, Wheeler & Wilson, Howe, Singer & Co., and Bachelder. All other machines now sold for less than forty dollars each are infringements, and the seller and user are liable to fine and imprisonment. Salary and expenses, or large commission, allowed. Illustrated circulars sent free. Address  
SHAW & CLARK, Biddeford, Maine.  
ju 3t



**DOTY'S CR8 CLOTHES & WOOL WASHERS.**

**DOTY'S PATENT  
CLOTHES AND WOOL WASHERS.**

**Economical, Durable, Simple, Efficient, Con-  
venient, and Easily Operated  
WASHING MACHINES!**

The FIRST and ONLY ONES out of more than one thousand patented that have proved

**UNIVERSALLY SUCCESSFUL!**

They save full two-thirds the Labor, Time and fatigue of hand-washing, take less Soap,

**Save \$20 to \$100 a year**

in Wear of Clothing, and will last many years.

THESE WASHERS WERE EXHIBITED AT THE GREAT NEW ENGLAND FAIR OF 1864, WON THE ADMIRATION OF THOUSANDS, AND WERE AWARDED A SPLENDID DIPLOMA; ALSO AT THE WISCONSIN AND PENNSYLVANIA STATE FAIRS OF 1864, THEY WERE AWARDED THE FIRST PREMIUM.

Wool Fleeces may be washed in these machines at the rate of A FLEECE IN TWO MINUTES, without tearing them apart, and the wool brings the price of TUB-WASHED WOOL, which is FIVE TO EIGHT CENTS PER POUND MORE than that washed on the sheep. This is very important to every wool-grower.

They are recommended as the Very Best in SOLON ROB-INSON'S great new work, "Facts for Farmers," by ORANGE JUDD, proprietor of the American Agriculturist, and by JOSEPH HARRIS, proprietor of the Genesee Farmer.

SEND FOR CIRCULAR.

AGENTS WANTED EVERYWHERE.

**DOTY BROTHERS, Janesville, Wis.**

**DOTY BROTHERS, 151 Nassau St., N. Y.**

**J. B. LAWES'**  
ARTIFICIAL  
**MANURES.**

FACTORIES,  
DEPTFORD AND BARKING CREEKS, }  
ENGLAND.

LONDON OFFICE,  
No. 1 ADELAIDE PLACE,  
LONDON BRIDGE, E. C.

THE undersigned, having been appointed Sole Agent in the United States for the sale of the celebrated and well-tested (through all Europe and the East Indies) Artificial Manures, manufactured by J. B. LAWES, Esq., of Rothamsted, St. Albans, Eng., whose works are the LARGEST and OLDEST of the kind in the world, now takes much pleasure in informing the Public that he is prepared to introduce them in this country in all their different branches, viz., for the production of

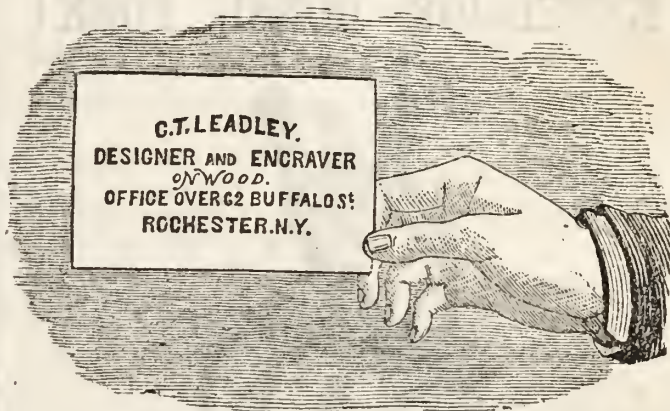
**WHEAT,  
CORN,  
GRASS, and  
VEGETABLES of all kinds.**

Farmers and Agriculturists from all parts of the country will be supplied on the most liberal terms, and all orders and inquiries promptly attended to.

**RUFUS W. LEAVITT, Agent,**

novtf

118 WALL STREET, NEW YORK.



HAVING had considerable experience among some of the first-class Artists and Engravers in New York, I have returned to Rochester and established myself at the GENESEE FARMER OFFICE, No. 62 Buffalo street, third story, where I am prepared to execute all orders for Engraving.

MACHINERY, IMPLEMENTS, CATTLE, HORSES, SHEEP, POULTRY, PIGS, BUILDINGS, PLANTS, FLOWERS, FRUITS, &c., promptly executed in the highest style of the art, and cheaper than any other establishment in Rochester. ORDERS BY MAIL PROMPTLY ATTENDED TO.

STEREOTYPES AND ELECTROTYPES furnished at the lowest rates. Address

C. T. LEADLEY,  
Box 900, Rochester, N. Y.

**Babbittonian Penmanship.**

THIS SCIENTIFIC and SELF-TEACHING system, which is being ordered by the thousand and sent to every part of the Union, consists of nearly one hundred copies on self-explaining card-board copy slips, and will guide the learner to an elegant command of the pen without schools or teachers. Terms, post-paid to all parts of the Union, \$1.50. Terms to Teachers and Clergymen, \$1.

"The Babbittonian system of Penmanship is splendid."—J. H. Myers, *Spencerian Penman*.

"It is chaste and beautiful."—*New York Evangelist*.

"The most scientific and beautiful of systems. An editor of a religious journal has called it magnificent, and worth \$5 instead of \$1.50."—*Journal and Messenger*.

"Babbittonian Penmanship is far in advance of all other systems. 1st. It is more scientific. 2d. It gives a more complete elementary discipline. 3d. It is more beautiful. 4th. It is more practical."—R. M. Boggs, *formerly Spencerian Penman*.

"Admirably adapted to the end in view."—*N. Y. Observer*.

The system is unequalled for use of schools as well as private learners, great reduction being made. *Splendid terms offered to Agents.* A fine

**GOLD MEDAL**

offered to the best Babbittonian Penman, and another for the best improvement from Babbittonian copies.

Send for Circular, or forward money for Penmanship to **BABBITT & WILT**, Principals of *Miami Commercial College*, Dayton, Ohio.

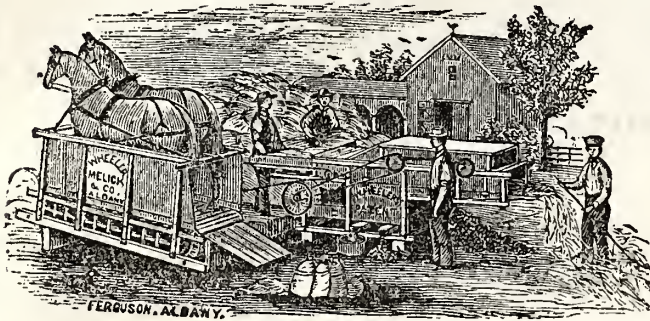
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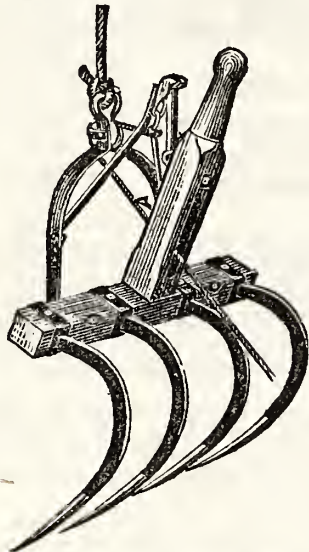
**New York State Agricultural Works.  
WHEELER, MELICK & CO., PROPRIETORS,  
ALBANY, N. Y.,**

PATENTEES AND MANUFACTURERS OF

**Railway and Lever Horse Powers,  
Combined Threshers & Winnowers,  
Clover Hullers, Feed Cutters, Saw Mills,  
Shingle and Heading Machines, Horse Pitch-  
forks, Horse Rakes, &c.  
(SEE CUTS BELOW.)**

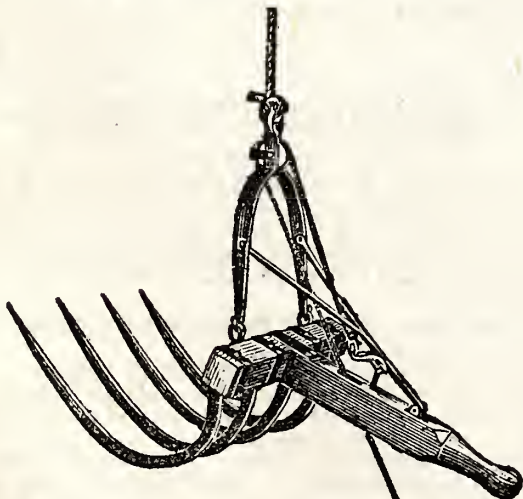


**EXCELSIOR HORSE FORK!**



**THE BEST IN USE.**

Patented by N. Palmer, September 30, 1862, and March 3, 1863.



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May 1, 1865.—3t

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## WALKS AND TALKS ON THE FARM.—NO. 19.

JOHN JOHNSTON wrote us to-day, (June 8th,) that winter wheat and winter barley are both good crops this year in his neighborhood, though not so early as he anticipated a month ago. He says :

"I did last year what I never did before ; that was plowing up wheat stubble and sowing again with wheat. It is a respectable looking crop now, but if you saw the half of the field that I sowed salt on, say a full barrel to the acre, I am almost sure you would order forty or fifty barrels of second quality salt to sow in September or October. The salted wheat stands much thicker on the ground, is considerably taller, came in ear fully four days before the other, and altogether looks richer every way ; and as I had not salt enough to sow the whole field, I sowed the half that has hitherto brought the worst crop and latest in ripening. Now it is much the best. I can stand in the middle of the field and look forty-five rods each way and see distinctly how far the salt came, or I can walk or ride down the side of the field where not salted, and see the line as plainly as if the one side was corn and the other wheat. If this won't make men experiment with salt, I don't know what will.

"My great crop this season is winter barley. It is my first crop of that kind, and if it don't get laid it is as good as any man could wish to see. It is now beginning to get yellow for the harvest. It was sown I think on the 11th and 12th of September, the field thoroughly summer-fallowed, rolled after the drill, and full one barrel of salt sown to the acre. I never saw such a crop. My neighbor, Mr. Noyes, has also a very good crop, but I have not been to it ; still should we have heavy showers, mine might be greatly damaged, as it is both too thick and too tall. I guess it stands about four and a half feet high, or nearly. I sowed two bushels to the acre, but I am sure one and a half bushels would have been enough. We need rain here very much for spring crops. There was heavy rain and hail some three miles from here yesterday. If you lack faith in salt, I want you to try one barrel on an acre of wheat, on

*dry land.* If it don't pay, charge the cost of the salt to me."

I will buy a barrel or two this fall, but I have not much faith in the efficacy of salt, except on rich land—and unfortunately my farm does not exactly belong to that class. What I want is ammonia and phosphoric acid. Salt will supply neither. Give me the former first and then the latter may be of use. Mr. Johnston has been applying them to his land for years, in the shape of rich manure made from clover and oilcake. My land never saw or heard or smelled a bushel of oilcake since it was cleaned of the original forest forty years ago. "Why sir," said an old resident a few days since, "one year Tom —— set three of us to mow that meadow you have been draining. It had been sheeped to death. Tom was a great hand for sheep. He thought he could make the land rich by keeping sheep. They were half starved and ground everything into the ground. We did not want to cut the grass,—it was so poor. The spears were about a foot apart and the scythes had to be very sharp to cut it at all. But Tom would have it mowed. We worked hard all day and at night we could have carried home on our backs all that we had cut."

There may be land on my farm that needs salt to check over-luxuriance, but as yet I have not discovered it. It is true that land which has been water-logged for years is usually quite productive after it is drained, and it is very probable that salt might be used on such land. But my dry upland needs several years good culture and high manuring before I shall expect much benefit from salt.

My peas are splendid—the best I have seen anywhere. I sowed Lawes' wheat manure on half of them and Tasker & Clark's superphosphate on the other half. I intended to have put a barrel per acre, but the men only got on eight barrels on the ten acres. This is not quite enough, but I am mistaken if I do not have a big crop—big enough to check, if not to smother the thistles. I intended to have summer-fallowed the field, but the Deacon persuaded me to sow peas and sow wheat afterwards in the



fall. He thought the land had been "sun-burnt" quite enough. Now what I want is a horse hoe, for hoeing wheat in the spring, and you smile, but such machines have been used in England for many years. The wheat can be hoed with them for twenty-five cents an acre. If the season is favorable, the wheat is gone over two or three times and the land is as clean as possible. They say that there is comparatively little advantage in drilling-in wheat unless you hoe it afterwards. Be this as it may, there can be no doubt that drilling and hoeing would be one of the greatest improvements that could be introduced into this section. On many farms red-root half chokes the wheat, and thistles are not rare. We could destroy the red-root and other weeds easily by hoeing, and the thistles, if not killed, would be so checked as to do little damage.

There was a gentleman from Herkimer county here a few days ago, and he went into extacies over our cherry trees, loaded with fruit. He says that the cherry trees in his section are affected with a knot similar to the black knot on plum trees. He thought the land, too, was "beautiful"—so free from stones, so clean and so easy to work. "You beat us altogether in grain and fruit," he said, "but we can beat you in cheese." I told him that every section had its advantages and disadvantages, and it would be a blessing if people would only realize it, and not be so anxious to leave the location where Providence had cast their lot.

He spoke in praise of the "cheese pastures—of the superior quality of the cheese, and of the saving of labor in the farmers' families."

I told him that several years ago I visited Herkimer county, for the purpose of studying the system of cheese making, and was delighted with the labor saving appliances there introduced. With their vats for raising the temperature of the milk to any desired point and for separating the curd from the whey, and their easily worked and powerful presses, I thought cheese making, as compared with the old fashioned process, was nothing but a pleasant pastime.

I put on a good top-dressing of manure last fall on half a field of grass land intended for corn. I have just been over the field and am astonished at the effect the manure has on the corn. It is much the poorest part of the field, but the corn is far better.

I was telling you about the Potato Planter. The potatoes come up better than expected. I am satisfied that it is a useful machine. I made one mistake. Mr. True came up here to show me how to work the machine. This was on the 21st of April.

The land was somewhat wet, and the roller for covering the seed clogged a little. Then again I was not sure that the machine planted them with sufficient regularity. My man agreed that the old fashioned way was the best. This was to be expected, but Mr. True himself thought the potatoes were not of the right size and shape and felt doubtful as to the result. I planted two rows and gave it up till I could get the right kind of seed. Other matters were pressing, and it was ten days before I got at it again. I have not the least doubt that it would have been fifty dollars in my pocket had I kept on. These two rows came up as well as could be desired and are now looking splendidly. Every time I look at them I am reminded of the advantages of *getting crops in early*. It frequently makes all the difference between a good and poor crop—in other words, between one that affords a fair profit and one that involves a loss.

We had a tremendous shower yesterday, (June 19th.) It only lasted about an hour, but I think over an inch of rain must have fallen. A few hours afterwards I went to see how my main under-drain, with five inch pipes, got along. The water came through in a torrent. It is over a thousand feet long, with a fall of about three feet, and it was "fun" to see the water rush out of it and strike the opposite side of the open ditch. It enters the open ditch nearly at right angles, which is a mistake; it ought to enter it more obliquely, as such a force of water will be likely to wash away the bank.

An inch of rain gives about 22,500 gallons of water per acre. I calculated to drain over twenty acres of land with this five-inch main drain. But will it do it? There must have fallen yesterday in *one hour* on this twenty-five acres over *half a million* gallons of water. I suppose a five-inch pipe, with say six inch fall in a hundred feet, would discharge, with the ordinary irregularities in laying, not more than one hundred and seventy-five thousand gallons in twenty-four hours. Accordingly it would take three days to carry off the water that fell in one hour.

In England a five-inch pipe is ordinarily quite large enough, as a main drain, for twenty-five or thirty acres. But then they never have such heavy showers as we do here, and as nearly all our facts in regard to under-draining are derived from the experience of English farmers. We shall have to experiment for ourselves before we can proceed with any degree of certainty.

One thing seems clear: that we are liable to fall into the error of laying larger tiles than are necessary for the sub-drains, while we do not use tiles of sufficient size to carry off the water in the main drains.

John J. Thomas, in *Rural Affairs*, goes into a cal-



culation to show the size of tiles necessary to drain land. He says :

“ It is necessary, first, to ascertain the amount of surplus water existing in an acre of soil, at the wettest period. This will vary considerably with the nature and depth of the soil, but it may be laid down as a general rule that the soil and subsoil down to the depth reached by drains, when heavily saturated with water, contains a needless quantity, at least equal to a depth of three inches over the whole surface, which would be more than one thousand hogsheads per acre. The drains should be of such a magnitude as to carry this off in twenty-four hours. If each drain relieves a space of a rod on each side, or a strip of land two rods wide, it must be eighty rods long for an acre of this breadth, and carry off forty-two hogsheads every hour, forty-six gallons per minute, or three-fourths of a gallon per second. A tubular tile, two inches in diameter, and perfectly smooth and straight, would accomplish this if it had a descent of one foot in twenty. With ordinary imperfections, it would require a descent of about one foot in ten or twelve. If the descent was only one foot in fifty, it would require a three-inch bore.

“The size of the drain is controlled by three causes: its rate of descent, its length, and the number of branches it receives. The length and number of branches may be included together, for three branches, each ten rods long, would be the same as a single channel thirty rods long. In all estimates, therefore, the aggregate length of the branches may be taken as that of a single drain ; and the area they cover will readily show how much water is to be carried off, allowing, as before, one thousand hogsheads per acre. By the use of the following table, which the writer of this article has calculated for this purpose, and which is sufficiently accurate for ordinary use, the size of the bore for different areas and slopes may be readily determined. A deduction of one-third to one-half must however be made for imperfections in the tile and laying.

Diameter of Bore.		Rate of Descent.		Velocity of Current per Second.		Hogsheads discharged in 24 hours
2 inches.	.....	1 foot in 100	.....	22 inches.	.....	400
“	.....	“ 50	.....	32 “	.....	560
“	.....	“ 20	.....	51 “	.....	900
“	.....	“ 10	.....	73 “	.....	1290
3 inches.	.....	“ 100	.....	27 “	.....	1170
“	.....	“ 50	.....	38 “	.....	1640
“	.....	“ 20	.....	67 “	.....	3100
“	.....	“ 10	.....	84 “	.....	3600
4 inches.	.....	“ 100	.....	32 “	.....	2500
“	.....	“ 50	.....	45 “	.....	3500
“	.....	“ 20	.....	72 “	.....	5600
“	.....	“ 10	.....	100 “	.....	7800

“For very short drains the preceding table would not answer, as it requires some length to give the water its full velocity.”

It is probably true that land “being saturated with water” contains an excess equal to three inches. But this would only be the case when the drains are first cut. After they were once fairly in operation the land would never be saturated to this extent.

The only experiments I am acquainted with bearing on this subject, are those made by J. Bailey Denton, on the Hinxworth estate, containing 800 acres. The land had been drained with bushes laid at close intervals, and from fifteen to eighteen inches deep, but the land still suffered from excessive wetness. It was determined to drain it thoroughly in tiles.

The mixed open soils were drained by occasional and wide parallel drains (from four to eight feet deep) “sufficient to discharge the rainfall and relieve the pressure of subterranean water passing through the soil from the higher grounds to their natural outfalls. The cost from eight to eighteen dollars per acre. On the clay land the drains were put twenty-five to twenty-seven feet apart, four feet deep, at a cost of from thirty to thirty-five dollars per acre. The object of putting them so close was to acreate the soil as well as to drain it. The total cost of draining the eight hundred acres was \$16,785, or about twenty dollars per acre.

A record was kept of the fall of rain and of the amount of water which was discharged from the different drains, every day for a journal for eight months, (October 1st to May 31st.) During this time the rain guage showed that 227,240 gallons of water fell on each acre. During the same time, the drains on the free soil, and where there were comparatively few required, discharged 160,920 gallons per acre ; while the quantity from the more numerous drains on the clays, was only 59,936 gallons per acre.

There was a fall of rain in October and November, of 3,275 inches, equal to a supply of 74,087 gallons per acre. The drains first commenced to treble on the 27th of November, after a fall of half an inch of rain. The test-holes (placed midway between the drains) showed that the soil was rapidly feeding itself and that the water level was rising, but had not reached the level of the drains. In the first part of December there were frequent rains, but not amounting up to the 12th, in all to one-tenth of an inch. On the 12th the drains were discharging one hundred and sixty gallons per day per acre. On the 13th there was a fall of rain of half an inch, and the outlets increased their discharge from one hundred and sixty to nine hundred and seventy-five gallons per drain per acre. In January, after more rain, the drains discharged 5,150 gallons per day per acre.

You see it took over three inches of rain in the



autumn to start the drains. Then, after that, the drains discharged in proportion to the rain fall. But the total discharge of water was only equal to about *half the quantity of water which fell on the surface*. I suppose the other half was evaporated. But the fact that the drains discharged over one thousand gallons of water per day per acre during the winter, shows how wet the land would have been without them.

I hear that the rust and midge are seriously injuring the wheat in Wheatland and Caledonia. This moist weather, however favorable for spring crops, is not good for wheat. We want dry, hot weather for its elaboration. I have not yet been able to discover any midge maggots in my wheat, but I presume I shall not escape, though I sowed "weavel proof" wheat.

#### THE MACHINE UNIVERSAL.

THIS machine existed at an early day in the world's history,—at a time when machinists were few. Still, it ranks among the first in importance, and, of all, it is the most worthy of consideration. Its record was traced in its origin by Adam, its first engineer. Then it existed in a rude state; its parts were imperfect, and not understood; experience and practice in its operations were required to give it the importance and perfection since attained. Its design is the result of no mechanical genius, although it has received the life study of the most eminent minds of all ages of the world. Napoleon viewed it with admiration. Washington saw and pronounced it *good*. By it man grows and nations prosper! It is the Republic's pride and strength in time of peace, and safeguard and security in time of war. Without its power this nation would be insignificant and powerless, a body without sustenance, a branch without support.

This important and powerful machine is the *Farm*; the farmer is the engineer. The machinery is complex, and requires the constant exercise of forethought, care and vigilance, to run it with profit. Like other machines, it is subject to wear in its operations; accidents happen to it; a screw becomes loose, a wheel, cog, or bolt, may break, any of which might suspend the motion of the whole. Particular care should be taken to keep this machine in good working condition, to which end the *lubricating material* should be properly applied, with first-class conductors and operators, such as proper training, study and experience will make, and the Machine Universal will never prove a failure, but a source of profit and enjoyment to the farmer, a means of wealth and prosperity to the people, and a blessing inestimable to the world.—I. W. SANBORN, in *Boston Cultivator*.

#### COOL WATER.

AT this season of the year a cool draught of water is a luxury which we may enjoy with a little care. By the following method, simple and inexpensive, water may be kept almost as cold as ice. Let the jar, pitcher, or vessel used for water, be surrounded with one or more folds of coarse cotton, to be constantly wet; the evaporation of the water will carry off the heat from the inside, and reduce it to a low temperature. In India and other tropical countries, where ice cannot be procured, this expedient is common. Let every mechanic and laborer have at the place of his work two pitchers thus provided, and with lids or covers, one to contain fresh water for the evaporation, and he can always have a supply of cold water in warm weather. Any person may test this by dipping a finger in water and holding it in the air on a warm day; after doing this three or four times, he will find his finger uncomfortably cool. This plan will save the bill for ice, besides being more healthful. The free use of ice water often produces derangement of the internal organs, which, we conceive, is due to a property of the water independent of its coldness.—*Maine Farmer*.

**BASEMENT STABLES.**—A correspondent of the *Country Gentleman* in reply to an inquiry in relation to the healthiness of basement stables, says: "I have generally kept from fourteen to sixteen head of cattle in the basement of my barn, with from three to four horses, for twenty years past. The horses are kept up the year round; the cows I generally turn out in the yard in front of the barn, when the days are pleasant. The stables are regularly cleaned every day, and well littered. A more healthy lot of stock I have never known, for I have not had a sick cow or horse since I have used these stables. I certainly like basement stables—they are warm and comfortable in winter, and cool and pleasant in summer."

**CURE FOR SCAB IN SHEEP.**—Daniel Kelly, Esq., of Du Page county, gives in the *Prairie Farmer*, the following as his remedy for this troublesome disease. He thinks it a sure cure. One pound of mercurial ointment, and three pounds fresh lard, well mixed together. Turn the sheep upon its back and anoint the bare spot under each leg, and also around each place where the "scab" has appeared. Keep the subject from the weather for a few days.

**CARE OF GOSLINGS.**—On the first day after the goslings are hatched, they may be left out, if the weather be warm, care being taken not to let them be exposed to the unshaded heat of the sun, which might kill them. For food, grain is prepared with some barley or Indian meal, coarsely ground, bran, and raspings of bread, which are still better, if soaked and boiled in milk, or lettuce leaves and crusts of bread boiled in milk.—*Browne*.



## RANDOM TALK ABOUT HENS.

WRITTEN FOR THE GENESEE FARMER BY C. N. REMENT.

## TO HAVE THE POULTRY-YARD PROFITABLE,

The hens should not be kept until they are old; hens after three years, will not produce as many eggs as those of one or two years; much, however, is depending on the breed kept so far as good layers are concerned. There is considerable difference in the number of eggs that the different breeds will lay, as well as the chickens of each breed. Some hens will lay an egg every day, others one every other day, and others every third day.

## HENS IN THEIR FIRST YEAR,

if early birds, will probably lay as many eggs as ever after in the year; but the eggs are small, and such young hens are generally unsteady sitters and cannot be depended upon as incubators.

## BEST FOWLS FOR COMMON USE

are a cross of the Asiatic or Dorkings with the common barn-yard fowls. If you wish your hens to do well and lay well, keep a middling sized cock, if the object be eggs; but on no account, keep a large or overgrown one. If you want to raise chickens for the table or for the market get the half-blood Asiatic, or Yellow-legged Dominique breed.

## SHELTER.

Fowls should always be kept in a dry, warm sheltered situation—a southern aspect is to be preferred—for they enjoy and benefit generally by the “warms in the sun,” as well as requiring protection from its scorching rays, and a secure shed for rainy weather. The roosting-house and laying-house, if separate, should communicate, that early layers may have early access to the nests, and also communicate with the storm-shed for the fowls to run in, in security if they should leave their roosts early in the morning. The nests should be numerous, if in boxes, not too deep but roomy, some situated high, some low, scattered around and as independent of each other as possible, each supplied with sweet soft straw, and a glass or porcelain nest egg. If the nests be too deep they break the eggs in jumping in and out, and if the nests are not roomy sitting hens have no room to turn easily, and consequently break the eggs by not being able to get to them softly. They then eat the broken eggs, which gives them the habit of doing so at other times.

## THE FEEDING PLACES,

if under cover, so much the better, as a precaution for wet weather, and as far as possible removed from the nests, that the hens which happen to be laying at the time or which may be sitting, may not be disturbed and enticed off their nests and eggs at improper times.

## WINTER LAYERS.

In order to have hens lay in winter—the season when eggs are scarce and sell at the highest prices—it is necessary to furnish them with warm, dry quarters, well lighted and well ventilated, and strictly clean; feed them all they will eat on boiled potatoes, mashed and mixed with meal, middlings or shorts in the morning, and corn, barley or buckwheat at evening—they are fond of variety. In feeding on potatoes alone without grain they are apt to make them scour; and we have found it indispensable not only to feed them in a boiled state; not *too hot*, however, as they are so stupid as to burn their mouths if permitted.

## AS A GENERAL RULE,

April is the best month for eggs and December the poorest. If many early spring pullets are kept the yield of October, November and December will be much increased.

HENS SHOULD NOT BE KEPT UNTIL THEY ARE OLD; after three or four years they should “go to pot.” There is no objection to preserving a favorite cock so long as he is active and lively; but hens after three years will not produce as many eggs as those of one or two years. Much, however, is depending on the breed kept, but more on the manner in which they are kept, so far as good layers are concerned.

THOUGH HENS SHOULD BE KEPT WARM IN WINTER, they should not be crowded together in small or contracted apartments, as without ventilation they are liable to disease from impure air. In mild weather, when the ground is bare, they should be allowed to go out in the sun. Give them ashes or any dry loam to roll in; it will tend to keep them free from vermin.

## COMPLAINTS

are often made by persons who wish to keep fowls, but are unable to do so because they cannot keep them out of their gardens. No such difficulty can be laid to the Cochin-Creepers. In character they are quite peaceable, very tame, and for domestic habits they are unexceptionable.

## EXCELLENCE.

If we should be asked what are the points of excellence desirable in fowls, we should say, they should be large, quick of growth, hardy, quiet, fit for the table at an early age, meaty, abundant layers, especially in winter, good mothers, good tempered and quiet in their habits.

## HENS SHOULD BE TREATED GENTLY.

Hens that are perfectly tame will lay many more eggs—some say twice as many as wilder ones. If you keep hens for the eggs only, the Spanish, Poland, Hamburgs, Leghorns, and Bolton Greys, will



be found better layers than the larger breeds. But for early or winter layers the Brahmas and Cochins—Creepers—in fact, most of the Asiatic breeds—are considered the best.

#### HENS WELL FED IN THE FALL

are the best layers, as much depends on their condition. If pullets are left to run at large in the fall and not fed well, they will not lay as early, nor so many eggs, nor will the eggs be as rich in quality

#### CHICKENS FROM ASIATIC FOWLS

are more hardy and much easier raised than any of the smaller kinds. They grow much faster, and if well taken care of will commence laying at the age of five or six months; sometimes at four months. They should be hatched in March or April and then your pullets will commence laying in the fall and continue through the winter if well taken care of. Chickens, if raised for market, it is best to have them early, and it is important that they should be nicely dressed if we would get a good price. Chickens that are carefully dressed and nicely put up, will often bring nearly twice as much as others that are really good, carelessly and slovenly dressed.

Poultry, it is generally thought, ought always to be confined, but if so, instead of a dark, close, diminutive hovel, and a 7 by 9 yard, as is often the case, they should have a spacious, airy, light place constructed for them. In both large and small establishments, it will be necessary to separate some fowls from the rest, when particular breeds are to be raised. Separate pens or wards must be provided either at some distance from each other, which is preferred, or with divisions to prevent any intrusion, by which improper crossing might be produced.

#### CLEANLINESS.

Fowls being cleanly by nature, thrive when regularly attended, but degenerate and sicken if neglected. In an artificial state of existence, they require to be supplied by art which in nature they would attain for themselves. For this purpose they should have a regular supply in some convenient part of their shed, of sifted ashes daily to bathe and roll in, and to cleanse themselves, and which should be often changed. This precaution will keep them entirely free from vermin of any description.

#### FOWLS ARE GRAZERS.

Green food being quite as necessary for health as corn or any kind of grain; to supply this requirement of nature, they should have daily a good supply of fresh green vegetables. Among the plants they reject are the leaves of strawberries, celery, parsneps, carrots, and potato leaves. They are most fond of cabbage, lettuce, turnip-tops and water-cresses; but on no account any sour plants which scour them, as do

spinach, the cuttings of grass-plats. Green food with fowls is an astringent, the very reverse of what vegetables are with us. That fact will not appear so surprising, when it is recollected that one takes them raw and the other cooked. It is unnatural; they have no good cooks amongst them in their own state; and it is decidedly injurious to their digestive organs, except when they are doomed soon to be killed for the table.

Poughkeepsie, June, 1865.

#### NOTES BY S. W.

THE Waterloo Races and Horse Fair came off on Wright's Course the two last days of May. De Balsac says, him who needs no exciting recreation is either a bigoted ascetic, or a slave to some devouring passion. I once heard of a *soi disant* Quaker, who would not eat streaked beans lest he should minister to the vanity of the creature. The great improvement in horse flesh in this region of late, has been remarked by many former residents, who lived here during the day of small things. Lloyd Minturn has done something for the improvement of the breed of horses by his importations from Vermont. But Joseph Wright is emphatically the empresario in equine stock in this region of country, and the good effects of his labors may well absolve him from the folly of quitting tobacco growing just as it was most profitable, because he wanted the large sheds to turn into stables for his hundred and fifty horses, brood mares, colts, &c.

#### THE SEASON AND THE CROPS.

The winter wheat crop never promised better, grass two weeks earlier this season than last; yet, you will hear scores of farmers complain of the season—too cold and wet at first, and now too hot and dry. But while it is so dry that the late planted corn cannot come up, that planted in early May is luxuriating in the hot dry weather. Blessed is that farmer who does not rely on the season to give him a crop planted out of season. Ask such a man if his crops do not suffer from the cool wet weather, and he will say he has provided against such weather by under-draining. Ask him now, if his corn does not suffer from drouht, and he will laugh at your simplicity. The man who plants in early May, has no more labor to perform to get a large crop, than him who plants in June has to get a small one. When a mechanic neglects or botches at his trade, his customers desert him and he is compelled to try some other business for support; but the farmer may neglect his calling with comparative impunity, as he can easily grow enough to make his own pork, and bread and butter; so that if he has nothing to sell he will not starve; and thus far he has escaped war taxes, and corporation taxes are among the realities which do not reach him.



## A PLEA FOR SORGHUM.

Your remarks in favor of beets for sugar making, because the refuse feeds cattle and makes manure, will apply equally as well to the Chinese cane, its top and luxurious leaves are more eagerly devoured by milch cows than beets, even before their juices are pressed and the leaves of beets contain but little dry matter; then the bergass from the pressed cane may be used in the compost heap or as bedding for cattle. Beets require as strong a soil for a maximum yield as sorghum, although the latter may exhaust the soil more, but as its cereal crop is small it cannot destroy manure like Indian corn.

## SURFACE MANURING.

John Johnston says that "one load of manure used in top dressing is worth two loads plowed under on stiff land." It is humiliating to be obliged to demur to the dictum of so successful a veteran in farming as Mr. J. But I have always found in my small experiments, that working in coarse unfermented manure to a clay soil, was the best way to make it both rich and friable. Concentrated manure is as much less permanent as it is quicker in its action; but that which is plowed under has not only a better mechanical effect, but its chemical aid is developed the second season if not the first. Yet on a light friable soil, top dressing with well rotted manure may be the most economical amendment. But I presume Mr. J. will say that his remarks are meant to apply to the top dressing of his wheat fallow with the well rotted manure from his farm yard. Here the mechanical effect of the manure prevents the freezing out of the wheat in winter and early spring, and the growing crop is immediately fed by the decomposed manure. But as Indian corn only grows in hot weather the decomposition of coarse manure begins *pari passu* with the growth of the crop, and when the ears are filling the final decomposition of the manure now perfects the crop.

## OLD SEED.

One great objection to seed from the seed stores is the doubtful age of the seed; the newer the seed the quicker it will vegetate and the stronger will be the plants. When I bought my onion seed from the shop, the seeds that did vegetate were a long time in the ground, and the plants were weak.

## ON ONION GROWING.

Our most successful market gardener never grows onion setts by themselves; he sows them thick in early spring in rows twelve inches apart, and sows the small ones for setts the next spring. He keeps out every weed, but he never thins out the onions. It is a great mistake to sow onions in August to grow setts for spring planting, as onions require cool,

moist, spring weather on the start. They must have roots deep in the soil to enable them to grow in hot weather. I have seen onions grow on top of each other, the roots of the upper one having to pass between the onions below to reach the ground; but this was on a soil manured and managed just right, too much manure is the cause of much failure in onion growing, as it induces the plant to run to top, and scullions are the result. On the drift formations near the sea the onion bed can rarely be made too rich; but over dosing with manure and late planting, is the cause of failure on the generous alluvions of Western New York.

Waterloo, June 14th, 1865.

## FOOT ROT IN SHEEP.

PERMIT me, through the *Farmer*, to tender my thanks to Mr. J. D. Kirkpatrick, of North Liberty, Pa. He offered, through the *Farmer*, to send (free) a recipe for curing foot rot in sheep to those who desired it. I wrote to him, and he kindly sent me the directions. I consider his plan the best I know of. I will give it briefly, for the benefit of sheep-raisers.

Pare the hoof well, taking all the loose horn off. Put butter of antimony on the sore first, then ordinary blue vitriol, dissolved in water; then tie up the foot with a rag, to keep dirt out of the sore; keep the sore foot from the ground, and repeat this operation once or twice a week, and I will guarantee a cure for the worst cases. The ordinary blue vitriol will do for common cases. The difficulty is, where the cavity in the foot is put bare on the ground, even after the disorder has been removed, dirt works up into the cavity, and irritation and soreness ensue again.

Do any of the readers of the *Farmer* know a sure, harmless remedy for ring-bone in horses?

HORATIO G. LAWRENCE.

Flat Brook, Columbia Co., N. Y., 1865.

A PROLIFIC PIG STORY.—The first of April, 1864, a female swine under the barn of Edward Earl, in Worcester, had a litter of thirteen pigs, eleven of which, when six weeks old, sold for \$14. In August following, the same animal had thirteen more, and raised nine of them, which sold for \$45. The 24th of February, 1865, to cap the climax, she brought forth seventeen more fine, healthy pigs, (although she had only twelve teats for them,) making in all three litters, within thirteen months, of forty-three pigs.—*Worcester Transcript*.

TO STOP CHIPMUCKS PULLING CORN.—"S. M. T." says his neighbors "soak their corn in a decoction of tobacco, and it has invariably put a stop to the depredations of the Chipmucks."—*Am. Ag.*



## A CHEAP AND VALUABLE PAINT.

ONE of our neighbors has painted his out-houses, fences, &c., with a paint made as follows, and found it nearly as good as ordinary oil paint and vastly cheaper. In fact the cost is scarcely anything except the labor:

"Take half a bushel of nice unslacked lime; slack it with boiling water, cover it during the process to keep in the steam, and add to it a peck of clean salt, previously well dissolved in warm water; three pounds of ground rice, boiled to a thin paste, and stirred in boiling hot; half a pound of clean glue, which has been previously dissolved by first soaking it well, and then hanging it over a slow fire, in a small kettle within a large one filled with water. Add five gallons of hot water to the whole mixture; stir it well, and let it stand a few days covered from the dirt. It should be put on right hot; for this purpose, it can be kept in a kettle on a portable furnace. It is said that about one pint of this mixture will cover a square yard upon the outside of a house, if properly applied.

"Brushes more or less small may be used according to the neatness of the job required. It answers as well as oil paint for wood, brick or stone, and is cheaper. It retains its brilliancy for many years. There is nothing of the kind that will compare with it, either for inside or outside walls. Coloring matter may be put in, and made of any shade you like.

"Spanish-brown stirred in will make red or pink more or less deep, according to the quantity. A delicate tinge of this is very pretty for inside walls. Finely pulverised common clay, well mixed with Spanish-brown before it is stirred into the mixture, makes a lilac color. Lamp-black in moderate quantities makes a slate color, very suitable for the outside of buildings. Lamp-black and Spanish-brown mixed together produce a reddish stone color. Yellow ochre stirred in makes a yellow wash; but chrome goes farther, and makes a color generally esteemed prettier. In all these cases, the darkness of the shade will of course be determined by the quantity of coloring used. It is difficult to make a rule, because tastes are very different; it would be best to try experiments on a shingle, and let it dry. We have been told that green must not be mixed with lime. The lime destroys the color, and the color has an effect on the whitewash, which makes it crack and peel.

"When walls have been badly-smoked, and when you wish to have them a clean white, it is well to squeeze indigo plentifully through a bag into the water you use, before it is stirred in the whole mixture.

"If a larger quantity than five gallons is wanted, the same proportions should be observed."

Our friend says that thirty cents worth of coloring matter will be enough for the half bushel of lime. Spanish-brown, yellow ochre, cost three cents a pound. Lamp-black and Princes brown five cents a pound. The latter gives a handsome lilac shade.

## UNDERDRAINING WITH RAILS OR POLES.

EDS. GENESEE FARMER:—Your remark in the June number of the *Genesee Farmer* that "for narrow drains, tiles must be used," I have put in some under-drains fifteen inches wide at the top and three inches wide at the bottom. In such a ditch you would say tile must be used. I have used wood for tile, not to have the water run through the wood, but under. The ditch should be not less than three feet deep. I make use of a pole or rail of the size that will go down to within five or six inches of the bottom of the ditch. Lay it in to the ditch; then tread it down so that it will set close to the sides of the ditch in order to prevent the dirt passing by it into the space below. Then fill up the ditch and you have a drain that will carry off the water as well and as long as a tile drain. Narrow drains cannot be made through coarse gravel or stony ground. On such ground a ditch wide enough to work in will have to be made. Then stone or tile will have to be used.

In making narrow drains one spade should be fourteen inches long in the blade, five inches wide at the top and three at the lower end, and made a little flaring. The handle should be four feet long, so that you can stand on the top of the bark and take the earth from the bottom. For cleaning out the bottom of the ditch use a piece of sheet iron, bent so as to make a scoop, that will go into the bottom of the ditch and clean out all loose dirt, with a handle four or five feet long attached to it. Such a tool any farmer can make. A drain as above described can be put in for one half the expense of a stone or tile drain made wider. Water can be made to pass off as well *through* the soil as on top of it, and the farmer that gives it a fair trial will find himself well compensated for the labor expended.

JOHN MCVEAN.

Wheatland, Monroe County, N. Y., June, 1865

PLOWING AMONG TREES.—In plowing among trees, and where it is desired to throw the furrow *from* the row, a plow with a movable beam, and set as "wide" as possible, enables one to plow much closer to the trees. When it is desired to throw the furrow towards the trees, the same plan is equally advantageous, but of course it should then be set as *narrow* as possible—i. e., the beam should be turned to the left.



## AGRICULTURAL IMPLEMENTS AND MACHINES.

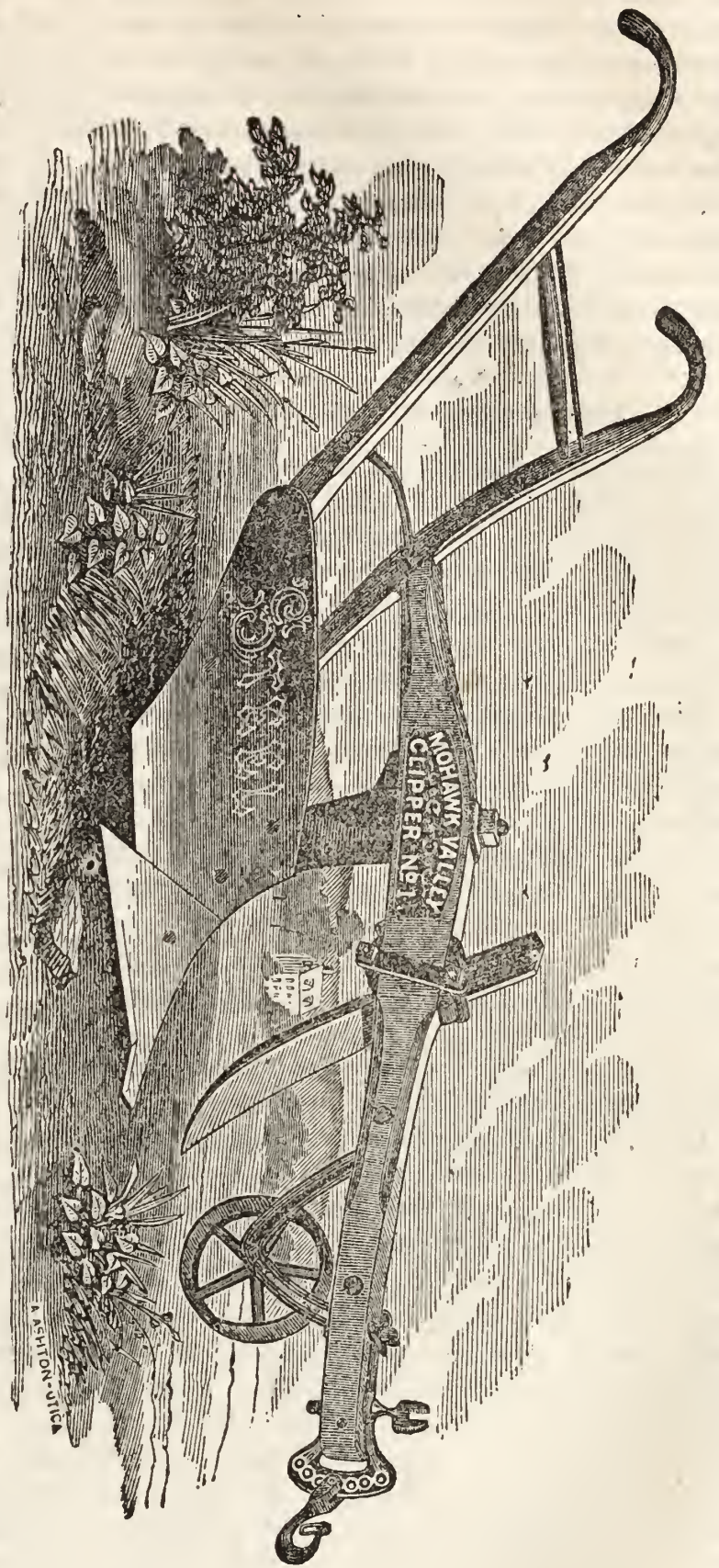
WE propose to give from month to month some account of the many valuable implements and machines now offered to farmers, and the manufacture of which forms such a striking feature in American agriculture. Great as have been the improvements which have been made during the last ten or fifteen years, we believe they are nothing in comparison to what we shall witness in the new era of American agriculture on which we are about to enter. The immense and fertile territory now open to Northern enterprise will require ten times the number of implements and machines for its cultivation than those hitherto used, while the abstraction of so much labor from other sections will compel us to resort more than ever to all useful mechanical appliances for the cultivation of the soil and the gathering of the crops. We are sure that under such circumstances one or two pages of the *Farmer* each month devoted to a description of useful implements and machines will prove of great interest to our readers. We shall endeavor to give illustrations of all the new inventions that promise to be valuable, but at the same time shall not neglect those which have been for some time before the public and which merit a more general introduction. We propose to commence the series with some account of a few of the implements manufactured at the REMINGTON AGRICULTURAL WORKS at Ilion, Herkimer county, N. Y. We have used many of the implements made at their works and can confidently recommend them to our readers.

**STEEL PLOWS.**—That steel plows are destined to be more extensively used is certain. They have many advantages over cast iron plows, such as keeping bright, cutting a clean furrow and running easier. JOHN JOHNSTON, of Geneva, writes :

"I did not get your Steel Plow tried until to-day. I assure you, I think it the best plow I ever owned ; it runs deep enough and covers up all the stubbles finely. I fully expected that it would plow sward land excellently, but did not expect it so good for stubble—nothing can do better ; and, like every good plow, is remarkably easy for both man and horses."

And again he writes, after three years experience : "I still think the Mohawk Valley Clipper the best plow I have ever used."

The only objection he has to the plow is that it is



set to take too wide a furrow ; but most farmers like a plow that will turn a wide furrow, and it may be said that this steel plow will turn a wide furrow easier than most plows will a narrow one. We understand that the Remington Agricultural Works are about to manufacture other patterns with steel mould-board, points, &c.

The Remington Agricultural Works also manufacture steel cultivators, horse hoes, steel toothed horse hay rake and many other valuable implements.



and machines, which we have not space this month to describe. Those of our readers in want of such implements can obtain a catalogue giving full descriptions of them, by addressing the "Remington Agricultural Works," Ilion, Herkimer county, N. Y. For cultivating among corn and potatoes and for hilling the latter, their Horse Hoe is the best implement we have ever used. Then the "Johnston Cultivator," made at the suggestion of John Johnston, is admirable for cultivating corn on clay land, and also for getting out quack grass.

#### FOREST TREE CULTURE—NO. 1.

EDS. GENESEE FARMER:—I am well pleased that the New York State Agricultural Society is about taking an interest in preserving and protecting forest trees. Many parts of the older States should have attended to this vital subject long before this.

You solicit some one to write on this subject who has had experience, and I give mine cheerfully:

From my boyhood I have been acquainted with woods—an inmate of the forests. In 1800, when a small boy, father migrated into the dense woods of Jefferson county, now State of Ohio. In 1810, we moved into Stark county of the same State, right among the huge, dense forests. Since then I have alone cleared up plantations at five different times; and always a close observer and admirer of nature, I say this to show that I had ample opportunity to learn by experience.

I proceed by supposing the wood lot is composed of old timber, such an one as nature makes.

If the lot has been over-run by animals, much grass of the fibrous-rooted kind will have taken root and matted the ground, than which nothing can be more injurious to the growth of trees of all kinds; in a word, to all vegetation. To eradicate the grass a shallow plowing might do good, but this would be impracticable. Where vacancies exist fill up with young trees—quite small ones will do. However, when no animals are allowed to run in the lot nature will do this; the nuts and acorns falling from the trees and sprouts, or scions, from the felled trees, and also of those stunted and crippled by animals, will in a great degree perform this work. Where trees die or where decay manifests itself, remove them either for fuel or other use—fill up with young ones. Never cut a tree for fuel unless there are no dead or such as are not fit for lumber or buildings. By no means suffer animals, especially cattle, to intrude. Strong cattle will hurt or destroy sapplings three, four, and even five inches in diameter by bending them down.

Let the young trees stand in close proximity, as that will induce them to grow straight and taller; if too close, the weaker will decline and die, as they

grow taller. And though they will prune themselves, it will be better to do this by hand and remove the dead and declining ones. This offal, with the fallen limbs of older trees, will afford fuel—quite a necessary article where timber is scarce.

No animals being admitted, the foliage of the trees, weeds and briars will form a covering on the earth very salutary for the growth of the younger trees. Briars and weeds with runners or branchy roots, will do no harm, but good, as they have a tendency to shade and thus mellow the ground. As the trees progress in growth, the weeds and briars will yield and die, and the trees will govern the whole surface to their advantage—the soil becomes mellow and congenial to their development. The decaying leaves will afford ample nutriment and supply all the elements for a vigorous and healthy forest. Observe how nature forms forests and follow its method.

I said before, that when a wood lot over-grown with grass a plowing might do good; but as this may be impracticable, a mulching of any material that would cover the ground well might do.

Let me say again, exclude all animals. Hogs, I think, would do no harm.

The forest once put in a healthy condition and by filling vacancies, will secure a continued vigorous growth, perhaps, as long as the earth may endure. A change of the varieties of trees may be indispensable after a long series of years.

A. BAER, JR.

Sodus, Mich., June, 1865.

CONTRIVANCE FOR HIVING BEES.—Mr. Amos Taber, of Albion, has left at our office, an apparatus for hiving bees, contrived and used by himself for several years with universal success. It consists of a board a foot wide and twelve feet long, elevated at an angle of about 45 degrees, the upper end of which is perforated with holes about two inches apart, into which long corn cobs are inserted, projecting downward. Bees when swarming, readily alight upon the cobs, as they afford an excellent opportunity for them to hold on upon, from which they can be hived without difficulty or danger, as the board can readily be placed immediately under the hive. A sample of the contrivance can be seen at this office, and we regard it as a simple and practical affair—one which every bee-keeper can make and use himself with little or no trouble.—*Maine Farmer*.

LICE ON HOGS.—The swine louse is readily destroyed by a strong decoction of quassia wood; tobacco water is also used, but requires especial caution in its application. A little benzine, dissolved in alcohol, applied with a shaving brush, or piece of sponge, is said to be a certain cure, but, like tobacco water, requires care in its use.—*Amer. Ag.*



## AGRICULTURAL EDUCATION.

AT a recent meeting of the Royal Agricultural Society of England, John C. Morton read a paper on agricultural education, in which he adduced some ideas that are well worthy of consideration.

To be a good and successful agriculturist, he said, needs not only familiarity with the ordinary routine of farm practice, and both industry and promptitude in its direction; it needs especially (1), the quality of patience by which her full share of the farm work is given to Nature to accomplish; and it needs especially, (2), the exercise of quick-sighted observation by which the earliest natural indications of what is going on, the earliest intimations of the natural tendency and movement whether to the good or bad, are detected in the living creatures which the farmer cultivates. Intelligence, activity, and promptitude in carrying out the routine of operations are necessary in every other business as well as that of farming; but none other, unless it too have equally to do with life, so needs the exercise of quick-sighted, careful, habitual observation for its successful prosecution—and in none other is there so much need of patience. I do not mean contentment, but a willingness and ability to wait for the full effect of the costless influences of Nature. A quick and watchful eye, and prompt activity at the proper time, have to be united with the faculty of waiting till the proper time in order to good agriculture.

Many an example, both mere incidents and whole lives, could be quoted in illustration of the need of both these qualities. Many of us have, I dare say, seen men of strong will—of course not bred to the business, or experience would have taught them better—tearing resolutely on in pursuit of the object which they had set themselves; regardless of weather, prejudices, habits; enforcing the material result by steam if horses would not do, by imported hands if the home-bred laborers were insufficient—in the end correcting at great loss their blunders, and confessing that the knot had been generally cut rather than untied—that difficulties had been swept out of the way rather than overcome, that the mere enemy, so to speak, and not the enmity had been conquered, and that the natural method by which men as well as mere material are converted, and by which things of themselves come round, hinging satisfactorily on the new element which may be introduced, is not only the cheapest but most efficient in the end. On the other hand of course it must be confessed that every neighborhood will furnish instances enough, and those too of men who have been bred to the business, where the natural method, as I have called it, has tended to listlessness and idleness, and ended in Nature not being *used* at all, but left almost altogether to herself.

These remarks have indicated and suggested rather than described the well-educated agriculturist. He needs, first, such a perfect and detailed acquaintance with the treatment of the soils, the plants, the animals which he cultivates, as experience, and in fact apprenticeship, can alone confer. And when you consider how many agencies he employs—working cattle, steam-power, laborers—what a magazine of mechanism there now is in agricultural machinery—on what a variety of soils, under what a variety of climates in this country he is placed—of how many plants and animals he needs to know the cultivation—how quickly in order to their successful management he needs to recognize and act on every aspect which they severally present under every variety of condition as to disease or health—how patiently, moreover, he has to deal with the living creatures which he thus has under his care, it must be plain to you that long and habitual practice and experience can alone confer the ability, or rather aptitude, which as a practical agriculturist he needs.

Then, as to the business arrangements which he has to conduct: there is the relationship to be maintained with the laborer, so that willing and intelligent services on one side may be secured by reasonable, firm and friendly bearing on the other; and there is the market skill, by which especially the right articles for purchase are selected, and also by which they are fairly bought and sold: and thus in the business of the farmer there is ample scope for judgment and resolution, for both decision and kindness of character, and for a skill and promptitude which are to be acquired of course in full only by experience, but which are needed from the very beginning of his career.

Lastly, there is the light of science, in the midst of which he ought to walk—no longer a slave to mere routine, but a freed man, acting intelligently within the known limits imposed by Nature's laws—perceiving the scope and tendency of every act that he directs—able therefore himself to suggest the improvements of which his art is capable, or at any rate to judge aright of those helps and alterations which others may offer or suggest.

It is however undoubtedly significant—partly perhaps of the existing educational status prevalent amongst farmers, certainly of the fact that barely a single generation has yet passed away since so many scientific men have been laboring in the field of agriculture, and certainly also of the paramount importance of technical and commercial ability, that is of skill and shrewdness for success in farming—that while we have amongst us maxims which insist on the importance of knowing the details of the business both in the field and in the market, there are none that I know of which urge the value of scientific knowledge.



I have heard often enough that there is a "rent" difference between the words "go" and "come" in agriculture, so that the farmer hiring land who can show and teach his laborers how to do it, is as well off as the yeoman owning the land he cultivates, who depends upon a bailiff. And we often hear, too, of the rent of a farm being "picked up outside the fences," *i. e.* made by market ability. But there is no such maxim in assertion of the commercial value of an acquaintance with the agricultural relations of the sciences. The tendency is still the other way. More than once, for instance, I have overheard that "a farmer with a chemical head is sure to have an empty pocket." Of course such an idea has arisen from examples where the failure has been owing, not to a knowledge of chemistry, but to an ignorance of agriculture—examples, too, most probably where there has not been much greater knowledge of science than of practice.

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How can those faculties be best educated, that knowledge be best conferred, that skill be best acquired, which the farmer needs? Of course the boy must go to school, whatever may be his future occupation; and, no doubt, the discipline, both of school life and of school work—the habits, on the one hand of obedience and regularity, and on the other of perseverance and resolution which thus arise—together with the actual knowledge and ability acquired—remain with him through life to his great advantage, whether he is to be a farmer or not. I do not pretend to discuss the relative merits in these respects of the various plans of scholastic training which have been advocated. Their bearing on a future good manhood is, of course, a far higher subject than the one which occupies us now. I presume, however, that in this room we have to do not with good manhood, but with the much humbler subject of good agriculture; and the elementary schooling of the boy can have but little direct or special relationship to the ultimate profession of the farmer. But, even if this were otherwise, I should not suppose schools, especially for farmers' sons, or for those of their sons who are to be farmers, to be at all desirable. There, surely, is some advantage in boys of city and country origin, commingling in school life. Rather than have the sons of farmers educated as a class, it would be better they should go where the peculiarities and self conceit of home life may be rubbed off; and some knowledge be acquired, from the beginning, that good sense and agreeable companionship exist in other professions as well as agriculture.

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On all these grounds it appears to me that elementary, general, and so-called middle-class educa-

tion, is scarcely an agricultural subject at all; and the only remark I shall venture to make upon it, where it is intended as an introduction to the agricultural profession, is that an ordinary good school training affords perhaps less scope for encouraging habits of observation than is desirable in the education of a boy intended to be a farmer; and also (to put it solely on professional grounds), considering the international relations which now obtain amongst agriculturists, there is probably less attention generally paid to learning French and German than there ought to be. As to the former point I think it would be a useful supplement to the ordinary school exercises, if the study of Botany and Entomology were encouraged and directed from a pretty early age, and the practice of drawing from Nature taught. A boy who, besides acquiring a certain acquaintance with the features, the history, the habits and relations of certain plants and insects, has actually produced a series of drawings of both from Nature in every stage of growth from seed and egg respectively, must have gone through a very useful—agriculturally useful—training of his powers of observation.

I leave, however, the subject of mere school training and come to the question before us. And the first remark to be made is that *agricultural education to be perfect must begin early on a farm.* \* \*

I do not attempt to prove this by an induction of examples—for it is impossible to collect the ten thousand instances which would be necessary for this purpose—but the opinions of experienced men are the result of just such an induction, however unconsciously they may have been arrived at. And some such opinions I proceed to quote. The late John Smith, of Bowldown farm, near Tetbury, in Gloucestershire, farmed between 1760 and 1800. His annual journals and letters, which I have seen, prove him to have been a shrewd, intelligent, and leading man among the agriculturists of that time, and he enjoyed a correspondence with men in ranks much higher than his own. In a letter of his to Major Ogilvie, of Forfarshire, there occurs the following passage, which, however extravagantly worded, is, I think, worth quoting on this subject. He says simply enough:

"I never knew a learned man who was a good farmer, and therefore I never lamented the want of an education. The time of life to make men scholars is the time for observation in the farming line, and it rarely happens that a man can be a proficient in that business unless he be trained to it from his youth." This was written, let us recollect, long before the agricultural relations of the sciences had been worked out. He even adds: "I would take a man that can neither read nor write to make a



farmer sooner than I would the most learned man. The former has no knowledge but what comes from Nature, and of good natural parts. The latter prides himself upon his reading and his education, by which he thinks of pulling Nature out of her course, and so of outdoing everybody."

I quote this as the utterance of a shrewd, intelligent, and successful farmer, notwithstanding the utter absurdity and folly of which many will pronounce it guilty, simply because of the trustworthy good sound sense which I contend that it also displays. If I were addressing agricultural students, or felt in any degree responsible for their success in after life, as, if their teacher, I should be, I would not utter one word in praise of scientific instruction, if they were to infer from it that it could in any degree dispense with the absolute and paramount necessity of practical knowledge and skill, and of that long-continued patient observation of Nature and of practice from early years by which they can be best secured. But it is plain that the old farmer, however right he was to insist upon the need of a knowledge "that comes from Nature," could have known little of science, which he here refers to under the words "learning" and "education," if he supposed that its tendency was to make men try to put Nature out of its course, and so outdo everybody. Science, which teaches us the limits imposed by Nature, is, on the contrary, the guarantee of true modesty and humility.

I quote now a more modern example of a judgment on the point under discussion. The following story was told me long ago by the Rev. J. C. Clutterbuck, of Abingdon, and it has always seemed to me full of useful truth on the subject of agricultural education:

"A young man fresh from the University, who had taken cordially to the position of a country gentleman—and, among other occupations, had adopted that of agriculturist—was riding round his land one morning with a neighbor of long experience and well-proved practical ability and judgment as a farmer. He listened with docility and good-will to the instruction and advice that were given to him; and, struck by the wisdom and good sense of his companion's discourse, he at length exclaimed, 'Ah Mr. —, I wish I knew as much as you do.' 'Make yourself perfectly easy on that score, my dear fellow,' was the reply—'You never will.' The one was fresh from the schools, and the other had spent all his life in the fields, and yet there was neither mock modesty in the speech of the one, nor arrogance in the answer of the other. Mr. — did not finish his reply:—'I have been accustomed, he might have said, 'to be amongst plants and animals, constantly riding and walking on the soil which sup-

ports them both, since I was a child. Ever since I can remember I have had to do with the tillage of the land, the cultivation of crops, the management of live stock. There is not an aspect of weather, land, or life, so far as the live stock of the farm are concerned, which I have not habitually witnessed, realized and studied. That of which instances and striking cases may be observed by you is foreseen or recognized by me in its first beginnings almost as if by instinct. Long familiarity with the details of my occupation, beginning, too, with the mind of a child which has hardly any other impression on it to weaken the sensitiveness with which its early knowledge is received, gives me, almost unconsciously, and without the effort of any special attention such as you must exercise, those intimations of fitness or of unfitness, of quality and condition, whether of soil, or crop, or animal, on which the right direction of our business of course depends.' Mr. — was perfectly correct; it is an immense advantage to an agriculturist, as to the follower of any other occupation, to learn that occupation young."

Take now the recently declared opinions on this subject of living men. One of the most intelligent and successful farmers in the West of England tells me:

"I left school myself before I was fourteen, and went at once to assist in every operation that might be going on, taking the milking pail morning and evening, seeing the cattle foddered properly, and lending a helping hand. I have never found a boy in the way after leaving school; and should quite despair of his making a man of business unless he had to mix with every thing that moved before he was sixteen or seventeen."

A North Lincolnshire farmer, who has had forty years' experience of the life of a tenant-farmer, and is well known and respected in his county, says:

"I attribute my success, under the good providence of God, in the first place to getting to know the practical part of farming in my youth, and following that up with tolerably industrious habits."

A leading Norfolk farmer says:

"I have not been unsuccessful, but I attribute that success in a great measure to the thorough practical knowledge obtained during apprenticeship."

An experienced Kentish farmer writes:

"My experience confirms the opinion that boys who begin early to learn the practical part of farming have great advantages over those even who are sixteen or seventeen before they leave schools." He adds:—"I invariably answer [requests for advice about the education of a boy who is to be a farmer] send the lad as near as you can to the place you



think he is likely to settle in as a farmer. Select the man who has the character of being the best farmer in his locality, and if you can find such a thing as a money-making farmer in the present day, get him to take him and treat him as one of his family."

Lastly, Mr. Clare Sewell Read, whose name is well known in this room, says :

"My individual experience is simply this : I was sent for six years years to a common commercial school at Norfolk, and when I was just fifteen I left school, and passed the next five years in learning farming at home. From twenty to twenty-eight I was engaged in managing farms and estates in various parts of the country, and I fancy in those eight years I gained more information, and a better knowledge of practical agriculture, than I should if I had passed my whole life in Norfolk."

And similar testimony to any extent could be quoted from every county in the kingdom—but, indeed it is not wanted, for surely it must be easy to convince a man that a sound agricultural education not only includes but *is* instruction in the art and business of agriculture.

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I venture to submit to those who are interested in this subject of agricultural education, that the young men whom they are anxious to equip aright for their agricultural career, have to gain their living by it ; and that therefore the aim and end of agricultural education must be professional ability. I picture to myself the case of a young man with the £2,000 or £3,000 on which he is to depend as a farmer, well educated—guaranteed as such by all the distinctions that the universities can award him, a proficient even in the various sciences with which agriculture is directly connected—he must be upwards of twenty years of age. He is not yet a farmer, and taking him, as for the purpose of this argument I am entitled to do, to be an average specimen of human nature, I venture with some confidence to tell him that a thorough good farmer he never will be. For agriculture is an art and not a science, and the years he has spent till now on schooling chemistry, and botany, ought most of them to have been devoted to his apprenticeship to the business by which his £3,000 are to maintain him and his future family. A large and liberal education is, I know, (or, I should rather say, I have no doubt), an immeasurable benefit to any man ; but it is simply mischievous and cruel—and will ultimately come to be so judged by the young man whose case I have supposed—to attach to the words "agricultural education," as a professional guidance for him and such as he is, any other than the simply professional meaning which they bear. I entirely

agree, therefore, with the authorities already quoted, in insisting on the need of an early apprenticeship to farming as being the essential substance of an agricultural education.

The testimonies I have quoted are, however, mere extracts from fuller statements, and the writers would, I believe, all agree with me in adding a good deal to the bare assertion of such a truism as this ; and perhaps the best way of making such additions will be to point out the difference between the Norfolk and Kentish farmer last quoted. The latter would send his boy into the district where he is ultimately to farm ; Mr. Sewell Read would send him to a distance from home, and he attributes the chief advantage of his own agricultural education to its having been obtained in many different parts of the country. I believe in the latter statement, and the advice which it conveys, as the safer and the better of the two. And seeing that it is generally impossible to obtain in this way that wider experience which is desirable, it becomes the more necessary that the agricultural student should learn the inner truth which underlies the varying particulars and shades of agricultural and all other experience, so that the essence of every act that he directs, and of every fact that he observes, may be understood apart from the wrapping of mere circumstances which disguises it. This inner truth is the subject matter of scientific teaching. The sciences of dead and living matter—chemistry, botany, physiology, and others—thus certainly are part of a sound agricultural education, because they include and classify and thus truly represent the facts with which the farmer daily has to do. Any agriculturist who is also to a certain extent a botanist, a chemist, a physiologist, has his mind as well as his mere hands and eyes occupied with his business, and his judgment is surer, safer, and more confident in unusual or untried circumstances, not only because it acts upon this inner truth which circumstances disguise to the mere outward eye—but also because by larger exercise and freedom it has thus itself become an instrument of greater aptitude and power. I ought perhaps to beg pardon for occupying your time with truisms of this kind, and I will therefore conclude this part of my statement with a short reference to the way in which the practical and scientific parts of a complete agricultural education may be best obtained. It is the desirableness of uniting the two that makes institutions of the class of the Royal Agricultural College so valuable. Such institutions should, in my opinion, be not scientific but agricultural colleges. Their purpose, aim, and end are to turn out agriculturists ; their business is to teach agriculture—agriculture, certainly, and therefore anything that will throw light on agriculture also. It is, however, difficult, and perhaps impossible, to give that pre-



ponderating importance to instruction in farm practice in any scheme for the arrangement of the time of sixty or eighty young men at an institution of this kind, and therefore I am inclined to think that the best result will be obtained where such colleges receive young men after three or four years' residence upon a farm at home or elsewhere. They would at the College have for a year or two opportunities of becoming acquainted with the sciences, and their relation to the art and business of the farmer, while at the same time the routine of work upon the College farm would keep fresh their familiarity already acquired with the practical details of farming.

A young man of twenty-one or twenty-two about to enter on a farm is unusually well qualified both to make his business answer for himself, and to make it respectable in the eyes of others, who, having up till fifteen or sixteen been well educated at a school, has since that time been resident on a farm, or what is better, been resident on more than one farm, obtaining a practical acquaintance both in the field and in the market-place with all that the farmer orders and his laborers *do*; and who during the last year or two has been at such a college as Cirencester; especially if during all this time upon these farms he has been taking some interest in those sciences taught there to which agriculture is especially related,—and especially, also, I will add, if all along he has also taken a *reasonable* degree of interest in all the social as well as strictly professional duties, occupations, and enjoyments of country life.

Perhaps even now he had better go for a year with a salesman, accountant, or other professional man, and learn by practice the order, economy, and punctuality of a well conducted business before he enters on business for himself. And I do not doubt that, supposing a young man to have no more than £2,500 or £2,600 at his disposal, it will have nevertheless ultimately well answered his purpose, though so much as £500 or £600 has been spent by him if necessary in this way, and his capital thus diminished to this extent.

THE Boston *Cultivator* says: "Let it be a rule of every thrifty farmer that no weed shall be allowed to bloom on his cultivated grounds." The same rule should also be extended to the uncultivated ground—to the corners of fences, stone heaps and other waste places where weeds delight to grow and where they are too frequently allowed to go to seed.

GREASE THE IMPLEMENTS.—A correspondent of the *Prairie Farmer* truly says that the application of grease (unsalted) to plows, cultivators, hoes, spades, &c., would save much labor in scouring. Whenever any implement is to remain unused for a short time, let the grease rag be used at once.

#### INFORMATION ABOUT MUCK DESIRED.

EDS. GENESEE FARMER:—Will you please jog the elbow of Prof. S. W. Johnson, or some one who will tell us in the *Genesee Farmer*, something more definite and extended about muck. I deem this a matter of great importance generally, as it is certainly to me. I own, in the town of Salem, where I reside, a deposit of muck of many acres in extent, situated at the base of a large hill, and bordered and divided by ridges of gravelly soil, and in one place by a fine fertile alluvium of about twenty acres in extent. The whole area seems once to have been occupied by a lake, as I have been led to believe, by my discoveries in digging wells, the earth seeming to have been deposited in successive layers by the action of water. Some of my muck land is in natural meadow, producing blue joint and other wild grasses. Some of it overgrown with a species of hard hack, as it is called here, and some of it is covered with a thick growth of cedar, fir and spruce. I have also, in the town of Phillips adjoining, a tract of about ten acres, lying near the village, and which was also evidently once a pond. It produces but little grass, but is covered in one part with a growth of hackmetack, in the rest with hard hack, interspersed with coarse grass and wild cranberries. Now, having such a large amount of this material, it will not be thought strange that I should be anxious to know as fully as may be, its exact character, in order that I may go to work more intelligently to avail myself of its benefits. Now I have some views of my own, and have sometimes thought of presenting them to the public through the *Genesee Farmer*. But recollecting that "a little knowledge is a dangerous thing," I have been unwilling to trust my smattering of chemical science, and prefer making inquiries of those who can easily tell me and others what we wish to know on this important subject. It had been my supposition that we were to look for the sources of ammonia only in animal excrements, and the result of animal decomposition. In this I was probably mistaken. But even if not, I imagine that some descriptions of muck must be supposed to contain a considerable quantity of ammonia, especially in the case of ponds filling up, where there would be, for a succession of ages, innumerable insects and water animals, whose excrement and decomposition must furnish a considerable amount. But I leave these remarks, hoping, if you see fit to publish them, that they may elicit from some competent pen the information that is needed.

ALBERT PEASE.

Salem, Franklin County, Maine, June, 1865.

We should esteem it a favor, as we are sure many of our readers would, if Prof. Johnson would give us an article on this subject.—[EDS.]



### THE EMIGRATION TO AND FROM MARYLAND.

THE Maryland *Farmer & Mechanic* has an article on "The Sale of Maryland Farms," from which we make a few extracts. It says truly:

"One of the most serious questions that is now pressing upon the farmers of the border States for a solution, and which will continue to be a matter of the gravest anxiety, for some time yet to come, is in regard to the change that has so abruptly taken place in the system of labor and its effect upon the tenure of lands. We know that in consequence of the losses sustained by many of the farmers on the Eastern and Western Shores of Maryland, they have offered their estates for sale, being urged thereto either by the necessity of the case or from the distrust of the future. Where the impelling motive is actual impoverishment, with no hope of relief except by realizing the value of what still remains to them, the matter is one which is scarcely open for argument. But where the losses incurred do not amount to a positive disability to carry on the operations of the farm—although, perhaps, on a more limited scale than heretofore—we respectfully urge upon all such to consider well what they are about to do. We know that the social amenities have been terribly shaken by the war; that radical changes have been made so suddenly in the border States as to entirely subvert the old order of things; that individual and neighborhood antagonisms have been generated which time and better counsels and kindlier feelings can alone soften or allay, and that in this disturbed condition of affairs men's minds are perplexed as to what course it is best for them to take, not only to retrieve their shattered fortunes, but also to attain to that calmness and repose of which they stand in so much need. But will the sale of their farms, the disruption of old ties, the abandonment of cherished associations—will those conduce to peace of mind, or tend, in the majority of instances, to promote the temporal benefit of those who have determined upon them? It is no light thing for a man long settled in one place, to surrender up, even for a fair money value, the old homestead to a stranger.

"Where are such men to go? South of the Potomac? Is the state of affairs any better there than it is here? Has not the land been even more devastated by war? Are the people happier? Has not death or affliction, in some form or other, cast a shadow over almost every household in the land? Suppose, instead of moving to the South, they endeavor to build up a new home at the West. There is but very little of government land now to be bought east of Kansas or Iowa. Nearly all the vacant lands of any value are in the possession of speculators. In the new States or Territories field

hands are as scarce as they are with us. There is little of what we call society; the roads are bad for the most part; the market for the sale of agricultural produce is at a remote point—schools and churches are scattered wide apart, and the value of the crops when grown and harvested is infinitely less than in the older States where the market is near at hand and the supply is rarely, if ever, in excess of the demand.

"We say then, that, all these things considered, and well knowing that wherever a man may be, he will have to struggle as best he may against adverse circumstances, it is far better that he should fight out his battle of life upon ground that is well known to him, and where he also is known, than to encounter his troubles in a strange region, among a strange people, and without a solitary friend to cheer him with a word of encouragement. The spirit of migration, which appears to be developing itself in certain portions of our State, is much more likely to prove injurious than beneficial to those who indulge in it. If they will but exert the same energy in the management of the farms they now hold that would be required to develop the resources of new lands, at the least they would have no reason to doubt where the balance of advantage would lie after the lapse of a few years."

There is much truth in this last remark. Those who think that less energy is required to obtain the means of a comfortable living in some distant place than where they now are, will, in nine cases out of ten, find themselves mistaken. Those who are selling their farms in Maryland and moving elsewhere, will find difficulties to overcome, perhaps, equally as great as those which now surround them, and those who are selling their farms in this and other sections, and going to Maryland, will also find that there are drawbacks as well as advantages in their new locations. Unless there are grave and solid reasons for the change, it is better to fight out the great battle of life where you now are. This desire to sell farms and move elsewhere is one of the chief reasons why our agriculture does not improve as rapidly as we desire.

**DISEASED STOCK.**—The Illinois Legislative Assembly has passed a law to "Punish persons for bringing diseased sheep into the State and for suffering diseased sheep to run at large." Any person bringing sheep into the State which he knows to be affected with a contagious disease, is liable to a fine of \$100; and any person letting sheep affected with a contagious disease run at large, is liable to the same fine.

**KILLING ELECCAMPANE.**—"P. F." says that the roots will be destroyed by fall plowing the land.





## GARDEN WORK FOR JULY.

EXCESSIVE heat and drouth are ordinarily the most dreaded contingencies of the gardener this month. The former can hardly do any injury to the garden, but it may drive the gardener into the shade, if he be an amateur, merely, or one whose ordinary avocation is within doors.

The *farmer* will not mind the heat, but I trust that this paper is read by very many who are not farmers, by mechanics, merchants, professional men, gentlemen of leisure, who cultivate their small city or village garden, to supply their table with its luxuries, to obtain healthful exercise, or from a *love* of the occupation.

Such may shrink from the broiling July sun, and begin to neglect their garden at this time, after having kept it in good condition for two or three months.

But they may be assured that if they retire before the sun, the weeds will not, but will flourish, luxuriantly, and may render of no avail much of the past labor, if not kept down. But there is one favorable consideration, the burning sun is a powerful auxiliary in destroying the weeds. Cut them up on a dry hot day, and they will not be likely to take root again.

Moreover, bear in mind always, the benefit plants will receive from stirring the soil in such weather.

If man has not the power to make it rain when he wishes, he has the power to bring the parched earth into such condition that it will drink up the moisture always existing in the atmosphere—and in a greater degree in hot than cold weather—and convey it to the thirsty plants.

No; do not forsake the garden now, but if unable to endure the heat of the mid-day sun, rise an hour earlier in the morning, and dig until the heat becomes insufferable, and then try it again towards evening.

*Asparagus*.—Has now given place to green peas. Let it rest, only passing over it occasionally and cutting up weeds. Asparagus is destined to occupy the same bed for years, it is important that no weeds be allowed to propagate, or they will eventually overrun and spoil the bed.

*Beet*.—It is pretty late, but the Early Blood Turnip may yet be sown with a fair probability of maturing.

*Beans*.—The early sorts may be sown the first of the month for string beans.

*Cabbage*.—Transplant to fill any vacancies occasioned by removal of early crops.

*Celery*.—May be transplanted into trenches, made rich, or set upon the surface. In either way the ground should be made mellow and rich.

*Carrots*.—Keep down the weeds, and sow early in the month the Early Horn.

*Cucumbers*.—Do not allow cucumbers to ripen on the vines, and plant for pickles.

*Melons*.—Hurry them up by liberal use of liquid manure. The melon is peculiarly adapted to the system in hot weather, but if neglected it hardly matures in this latitude until hot weather is past.

*Peas*.—As soon as the early peas are through bearing, they should be gathered and threshed. They are not suitable for seed, as they are generally the cullens of the patch, but are valuable feed for swine or any animal that will eat them.

*Potatoes*.—Should receive their last hoeing before the vines fall over. If weeds come up afterwards, they should be pulled by hand, and not left to rob the potatoes of moisture and food. In digging new potatoes before maturity for the table, select the hills having the largest and fewest stalks, as they contain the largest tubers. It is wasteful to dig them before they are full grown.

*Sweet Potatoes*.—Hoe them occasionally, lifting the vines so that they may not become rooted. I received my plants from the nursery of A. M. Purdy, South Bend, Indiana, and although transported over six hundred miles, so carefully were they packed, they arrived in excellent order.

*Tomatoes*.—Should be ripe about Rochester the latter part of the month. They are too great a luxury to be neglected. If inclined to run too much to vine, cut them back a little.

*Turnips*.—Sow Improved Ruta Baga, or Yellow Aberdeen, the early part of the month, in drills fifteen inches apart, and Red Top Strap Leaf broadcast the latter part.

## SMALL FRUITS.

*Grapes*.—Will pay for a little extra care in thinning out shoots and bunches of fruit.

*Raspberries*.—Remember that mulching will increase the crop, and prolong the season—particularly if dry. Keep down sprouts not needed for next year's crop, or new plantations, and cut out the old canes as soon as done bearing.

*Blackberries*.—The same remarks will apply to these as to raspberries.

*Strawberries*.—Should be cleaned out as soon as



done bearing, and a little fine manure applied to them. As I sit down to tea, with a dish of large, red strawberries "smothered in cream" before me, I can't help thinking how foolish are those farmers, who live on from year to year without any such luxuries in their garden. The life of the farmer engaged, solely, in raising field crops, swine and cattle, is not very enviable, but add to it the beauties and luxuries of the flower, fruit and vegetable gardens, and there are few avocations that have greater attractions.

Plant largely, and if there is more than your family can consume, they make a very appropriate present to your unfortunate city friends, or to your pastor.

P. C. R.

#### GRAPE CULTURE IN AMERICA.

THE following extracts, from the recently published report of the United States Census, will be read with interest. They are from the pen of Robert Buchanan, of Cincinnati, Ohio:

In the first settlements on this continent, the grape-vines found indigenous, were esteemed among the most valuable productions. In "Force's Collection of Historical Tracts,"—1620 to 1760—frequent allusion is made by the writers to our native grapes and to the wine made from them. According to Sir John Hawkins, wine was made in Florida in 1564. A vineyard was established in Virginia in 1620, also in 1647. In 1651, premiums were offered in Virginia for the production of wine. In 1664, a vineyard was planted near New York by Paul Richards, and in 1683 and 1685 attempts were made at Philadelphia, but failed. At a later period, Mr. Tasker, of Maryland, and Mr. Antil, of New Jersey, were more successful. These, however, were mere experiments. There is no evidence that wine was produced in any quantity worth naming until the close of the last and the beginning of the present century. About this period vineyards were planted in various parts of the Union, near the cities of New York and Philadelphia; near Lexington and Glasgow, Kentucky; Cincinnati, Ohio; Vevay, Ind.; South Carolina, Georgia and Virginia. These plantings were generally in small vineyards of one to five acres, and, unfortunately, most of them with *foreign grapes*, which, proving to be unsuited to our climate, resulted in failures. Those who planted with native grapes did better. In North and South Carolina, the "Scuppernong wine," from a native grape, soon became famous, and was praised as a home production worthy of American patronage.

At Vevay, Indiana, Dufour and his Swiss settlers adopted the "Schuylkill Muscadell," a Pennsylvania grape, then erroneously called the "Cape." This grape was found to suit the climate, and made a red

wine, that soon acquired a fair reputation, and laid the foundation for wine-growing in the west, with the better varieties that succeeded it.

The celebrated traveler, Volney, "tasted wine made from native grapes at Gallipolis, Ohio, in 1796," and Dufour, in 1799, "found a Frenchman at Marietta, Ohio, who made a few barrels of wine every year from grapes collected in the woods, equal to the wine made near Paris." Dufour further remarks:—"None of the different and numerous trials which were made in several parts of the United States that I visited in 1794, were found worthy the name of vineyards. I went to see all the vines growing that I could hear of, even as far as Kaskasia, on the Mississippi, where I was informed the Jesuits had planted a vineyard shortly after the first settlement of the country, but that the French government had ordered it to be destroyed, for fear that vine culture might spread in America and hurt the wine trade of France. I found only the spot where that vineyard had been planted, in a well-selected place on the side of a hill, under a cliff to the northeast of the town. No good grapes were found there or in any gardens of the country."

Dr. Daniel Drake, in an address on "The Early Physicians, Scenery, and Society of Cincinnati," states that "Third street, running near the brow of the upper plain, was on as high a level as Fifth street is now. The gravelly slope of that plain stretched almost to Pearl street. On this slope, between Main and Walnut, a French, political exile M. Mennesieur, planted, in the latter part of the last century, a small vineyard. This was the beginning of that cultivation for which the environs of that city have since become so distinguished. I suppose this was the first vineyard cultivation in the valley of the Ohio." The well-known naturalist, F. A. Michaux, in his travels through the United States in 1802, "visited the vineyard near Lexington and found but one variety of grape—a native, doing well,—the foreign mildewed." The foregoing extracts afford a fair sample of the pioneer efforts in vineyard culture in the west; they were much like those in the east, and wherever foreign vines were planted disappointment and loss resulted. In the South, owing to its genial climate, the experiments were more successful, but most so with native vines. In 1812, I was first cheered by the sight of a vineyard. It was on the south side of a hill at Rapp's German settlement, of Harmony, in Butler Co., Penn. The grapes planted were principally native varieties, the most of them "Schuylkill." Five years later I visited the vineyard of the Swiss colony, at Vevay, Indiana, where the same grape was the favorite. At the former the vines were planted in 1808, at the latter in 1806. The product was a red wine, resembling claret, but rather too harsh for the Ameri-



can palate. Still it was received with favor as a home production, giving promise of great results in the future.

I now come to a period when the second class of pioneers in this cultivation were more fortunate than their predecessors, and, with other grapes, produced better wines. About the year 1820, Major John Adlum, of Georgetown, D. C., first brought the Catawba into notice as a wine grape, and Thomas McCall, of Georgia, Mr. Herbemont, and other gentlemen of the South, the Warren, Herbemont, Madeira, and other varieties which have since proved so valuable.

To Major Adlum belongs the honor of introducing the Catawba, and so high was his appreciation of this grape, that he wrote to Mr. Longworth, of Cincinnati, that he believed he had conferred a greater favor on his country than if he had paid off the National debt; in which, after a trial of the grape for wine, Mr. Longworth agreed with him.

The memory of the late Nicholas Longworth, of Cincinnati, will ever be held in the highest esteem by the wine-growers of our country, as he was the father of successful vine culture in the West. By a large expenditure in money in his various experiments with both foreign and native grapes, during a period of forty-three years, he at last succeeded in producing sparkling and still wines highly creditable to himself and the country, and the practical knowledge he acquired from year to year was liberally made known through the public prints for the benefit of all.

The late John J. Dufour, of Vevay, Indiana, is also entitled to the grateful remembrance of the people of the United States, for his early and persevering efforts in the cultivation of the vine in this country of his adoption. For thirty years succeeding the introduction of the Catawba grape, the large emigration of Germans into the Ohio valley, many of them from the wine districts on the Rhine, furnished practiced and willing vine-dressers, who were glad to have the opportunity of trying their skill in this new country with a grape so promising. Numerous vineyards were planted in the Western States, in localities supposed to be favorable, especially in the vicinity of Cincinnati, and in 1850, Catawba wine, produced in hundreds of thousands of gallons, had acquired a high reputation as a rival of Rhenish wine, and became an article of export to our Eastern cities. The cultivation had spread all over the Western and Southwestern States, and we thought then, as we do now, that wine-growing would eventually be ranked amongst our most important agricultural interests. This the next generation may possibly realize.

Vineyard culture in the United States may now be considered as fairly established. Wine is made

in thirty of the thirty-four States of the Union, of different qualities, of course, and with varied success. As to its future production in quantity, I should name, first, California; second, the mountainous districts of the Southern States, as most favorable on account of the climate; third, the Ohio and Mississippi valleys; fourth, the Middle States; and last, the Eastern. As to quality, the best samples have been found in Georgia and the Ohio valley. The impression is, that in the Middle and Eastern States the climate is too cold to elaborate sufficient saccharine matter in the grape to make a wine that will keep without the addition of sugar. But this may prove a mistake—new varieties may yet be produced to suit each section of our country where the grape is grown. They are now numbered by hundreds, and new hybrids are annually added to the lists. After all our experience during the last seventy years, vine culture in the United States is but yet in its infancy, and we have much to learn. The few millions of gallons which we produce annually, are as nothing when compared to the nine hundred millions of France, or the three thousand millions of all Europe. The vineyards of Europe are estimated at twelve millions of acres. We have far more grape territory than that in the United States; but our climate, with the exception of California, is less equable. In California alone, it is stated, there are five millions of acres well adapted to grape culture. Here is something to reflect upon, and to give hope for the future.

#### CULTIVATION.

Vineyards are usually planted on hills, or rolling uplands; such positions are chosen on account of the natural drainage, which is considered essential. Porous soils are preferred to stiff clay, or such as are retentive of water. No trees should be permitted to grow within one hundred feet of the vineyard, nor should any crop be cultivated in it, as the vine is a selfish plant, and demands all the ground for its own use. The ground is prepared for planting by trenching with the spade two feet deep, or by breaking up with a subsoil and common plow 18 or 20 inches; the latter is much the cheapest, and always adopted where the situation of the vineyard permits. In planting the vines, the distance apart in the rows appears to vary in different localities. Around Cincinnati and in the Ohio valley, 3 by 6 is the usual distance; on the shores of Lake Erie, 6 by 8, and 8 by 8; and in California, 8 by 10 is recommended as the proper distance. The object in this country, where labor is dear, is to cultivate with the plow where it can be used, and to avoid the spade, which is expensive. Vineyard-planting is a system of dwarfing the vine, but with our long jointed and rampant-growing native vines it may be an error to plant too close, or to prune too severely. Our Euro-



pean vine-dressers, accustomed to short-jointed vines, naturally fall into that error here, but they are now correcting it.

The method of training also varies with localities. In the Ohio valley and the Southern States the single stake to each vine, and the bow system, is adopted. On the lake shore, and in California, the trellis is used, the vines being trained on it horizontally.

The estimated average annual yield of good vineyards in the West is about that of France—200 gallons to the acre. In the South they claim 500, and in California 800; these latter I consider too high. A bushel of grapes—fifty pounds—will make three and a half gallons of good wine, and a half gallon inferior. In a mere sketch like this article, it is only intended to impart general information on the subject of which it treats. But I may remark, in brief, that a free exposure to the wind, with the bunches of grapes sheltered from the hot sun by the leaves of the vine, tying neatly to the stake or trellis, a judicious shortening in of superfluous branches, and the keeping the ground cultivated and free from weeds, is considered essential.

The grape, like other fruits, has its enemies. The most destructive of these is the mildew or rot. Was it not for this disease, the Catawba would be immensely profitable; but of late years, in the Ohio valley, it has destroyed from one-fifth to four-fifths of the crop in many vineyards, and discouraged some persons from planting that fine grape. A sudden change of weather from hot to cold when the vine is in rapid growth, and the seed in the berries about hardening, is sure to produce rot. A free under-drainage—either natural or artificial—and a full exposure to the wind, will in part prevent it. No system of pruning or cultivation has yet proved a sufficient remedy in vineyards. Vines trained against the side of a house, and under cover of the eaves, seldom, if ever, rot. The disease probably results from atmospheric causes, as the rust in wheat.

Insects have not as yet been found very injurious, but the careful vine-dresser will watch closely, and permit none to get colonized in his vineyard. The frost in some localities kills the young shoots of the vine in April, or early in May, but the twin or latent bud will put out, and yield about half a crop. To prevent serious injury by hail, let the bunches of grapes be well sheltered by the leaves of the vine, which will also prove a protection from the hot sun.

#### VARIETIES OF GRAPES FOR THE VINEYARD.

These are now quite numerous, and every year adds more to the list. It will only be necessary to name a few of the most popular varieties:

1. *Catawba*.—Nine-tenths of all our vineyards in the West and Southwest are planted with this fine grape. With all its liability to rot, it continues a favorite.

2. *Delaware*.—This hardy and delicious table grape promises to rival the Catawba for wine. It is becoming popular with some of our best cultivators. The wine is light and delicate, and preferred to the Catawba by many good judges. The Delaware is less subject to rot than that variety.

3. *Herbemont* makes an excellent wine, but the vine is not hardy enough to be much planted.

4. *Norton's Seedling*.—A hardy, free-growing vine, but little affected by rot, makes a rich red wine like Burgundy, and is becoming quite popular.

5. *Schuykill*.—This old favorite of sixty years ago is now but little planted. The wine resembles claret when well made, but the vine bears light crops. It is almost free from rot.

6. *Isabella*.—Another favorite of former years that is now but little cultivated for wine. It is deficient in saccharine matter to make still wine that will keep without adding sugar to the must or juice; but the sparkling wine from it is delicious.

The Concord, Hartford Prolific, and some of Rogers' hybrids, appear to suit our climate, and to be free from disease, but are not yet fairly tested for wine. Grapes of recent introduction in high credit for Northern cultivation, are the *Iona* and *Adirondack*, natives of the State of New York, and the *Creveling*, a native of Pennsylvania. In the South, in addition to the Catawba, the Warren is largely cultivated, and the Scuppernong still holds the favorable reputation it acquired sixty years ago. Other varieties are being tested, which it is unnecessary to enumerate here.

MUSTARD TREE OF SCRIPTURE.—A plant of considerable interest was that sent by Mr. Bull, as the Mustard tree of Scripture (*Salvadora persica*), and which was the only species in the genus. He had his doubts, however, whether this plant was really the one alluded to in the parable, for the name of one plant was sometimes in the course of time transferred to another: thus the old Primrose was our Daisy, and the old Eglantine was certainly not our Sweet Briar. Dr. Royle, however, who was the botanist that had bestowed most attention on the plants of Scripture, considered the one before them to be the true Mustard tree. It certainly grew to a tree 20 feet high on the shores of Lake Tiberias, where the parable was spoken; but Dr. Hooker had informed him (Mr. Berkeley) that when in Palestine he saw *Sinapis nigra* all over the country, that it there grew 10 feet high, and that the *Salvadora*, on the contrary, was a rare plant; and he (Mr. Berkeley) thought that the balance of evidence was in favor of the Mustard of Scripture being the same as our own.—*Report of Royal Horticultural Society.*



## FRUIT GROWERS' SOCIETY OF WESTERN NEW YORK.

THE Summer Meeting of this Society was held in the Court House, in this city, June 21st. There was a good attendance of members and others interested in fruit culture, and a creditable exhibition of strawberries, cherries, &c.

Dr. Trimble, of New Jersey, the well known entomologist, was present, and was asked to make a few remarks. He spoke of the fine collection of strawberries on exhibition, and said that Triomphe de Gand succeeded much better here than in New Jersey. This year New York City is well supplied with strawberries. Camden and Atlantic counties, New Jersey, furnished large quantities. He noticed that Wilson's Albany was the variety most extensively grown. The Agriculturist was not fully tested. It is a wonderful strawberry. The berry is tolerably firm, sub-acid, and of remarkable size. It was originated by Mr. Seth Boyden, of Newark, N. J., the well known inventor. He is a remarkable man. Has a small place in the country devoted to strawberries, and the raising of seedlings, &c. He does not leave the fertilizing to chance, but does it in a scientific manner. Mr. Boyden thinks he has now a superior variety to the Agriculturist—the Green Prolific. Dr. T. regretted that the Agriculturist was not called the Seth Boyden strawberry.

Dr. T. also alluded to a remarkable cherry of great size, raised by a French gentleman in his neighborhood. In regard to the Cedar bird, it is true that they take some cherries, but they also eat the canker worm, and if it was not for the birds our trees would be stripped of foliage by this worm, as is the case in New Haven.

The committee appointed to name subjects, made their report, which was adopted, and the meeting discussed them as follows:

QUESTION 1. *What are the best six varieties of strawberries for private use?*

H. E. Hooker would prefer Large Early Scarlet to Jenny Lind. Triomphe de Gand proves its high quality this year. Russell's Prolific so nearly resembles the old McAvoy's Superior that it hardly deserves a distinctive name. It produces more perfect berries, but it requires plenty of staminate plants as a fertilizer. Berries are too soft, probably softer this season than usual on account of the wet weather. Did not think we had much of an acquisition in it. Would include it in a list for family use, but did not place it so high as some others.

Mr. Maxwell, of Geneva, liked the Triomphe de Gand; also, Wilson's Albany, when very ripe. Preferred the Large Early Scarlet to Jenny Lind as an early berry. Thought more of Russell than Mr. Hooker appeared to do. Had seen it very productive, with good culture and when well fertilized by the Wilson.

Charles Downing preferred the Jenny Lind to Early Scarlet as a table berry.

Mr. Ellwanger agreed with Mr. Hooker as to varieties, and would add the Red and White Alpine for family use; and also Burr's New Pine, on account of its quality.

Mr. Fisher, of Batavia, said the Wilson, Triomphe

de Gand and Hooker were the principal kinds cultivated in his neighborhood.

H. J. Brooks thought we should discard varieties that have no other merit than size. We should prefer those of high quality. We can raise strawberries cheaper than we can buy sugar. His first choice would be Triomphe de Gand, Hooker and Early Scarlet.

Mr. Crane said his first choice was Burr's New Pine. It is rather a shy bearer.

Mr. Downing said the only objection to it was its small size. It is desirable to have berries of good size on account of the labor of picking.

President Barry thought it was very desirable to get early kinds. We all know how good the first dish of strawberries tastes. Would not like to give up Large Early Scarlet. Jenny Lind is sweeter, but is not quite so productive.

Mr. Bronson, of Geneva, was somewhat disappointed with the Russell. It produces prodigious crops, but the berry is too soft, and this wet season begins to rot before it is fully ripe. It required a staminate variety to fertilize it. Thought high of the Triomphe de Gand. The Agriculturist is a variety of great promise.

Charles Downing thought the Agriculturist will prove a valuable berry on account of its size and high flavor. It is very productive.

Mr. Hoag, of Lockport, was somewhat disappointed in the Russell. It is a pistalate and needs a fertilizer. It is not the same kind, but closely resembles, McAvoy's Superior. The quality of the berry is good, but it is too soft. Named Triomphe de Gand, Hooker, Wilson, Early Scarlet and Jacunda. The latter appears to be as productive as Triomphe, and is of large size.

The members were asked to ballot for the best six varieties of strawberries for family use. There thirty-three votes cast, of which

Triomphe de Gand received, 30	Brighton Pine,.....	5
Early Scarlet,..... 28	Jenny Lind,.....	4
Russell, ..... 23	Crimson Cone, (for canning,) 3	
Wilson,..... 23	Agriculturist,.....	3
Hooker,..... 22	Longworth's Prolific,.....	2
Hovey,..... 8	Austin,.....	2
Burr's New Pine,..... 12	Bartlett,.....	2
Trollope's Victoria,..... 5	Buffalo,.....	2

Red Alpine, White Alpine, Catter's Seedling, Jacunda, Snow Flesh, Jenny's Seedling, Autumn Jaland, Alpine and Genesee received one vote each.

QUESTION 2. *Which are the best strawberries for market?*

Mr. Keech, of Waterloo, spoke highly of the Agriculturist for market. Superior to all others.

Mr. Wright, who has had considerable experience in growing strawberries for market, said he found Triomphe de Gand and Wilson the most profitable sorts.

QUESTION 3. *What are the best six varieties of raspberries for general cultivation?*

H. E. Hooker named Brinkle's Orange, Hudson River Red Antwerp, Franconia, Knevitt's Giant, Hornett and Black Cap.

Mr. Langworthy asked Mr. H. if he could not include the Philadelphia.

Mr. Hooker had understood that it was not equal to those named in quality.



Mr. Downing named the Orange, Franconia, (for cooking,) Hudson River Antwerp, Clarke, (a new variety, originated, we believe, at New Haven,) Vice President French, and Fastolf. Philadelphia is similar to the Purple Cone raspberry.

The President asked Mr. Downing what variety was most extensively cultivated for the New York market.

Mr. Downing replied, the Hudson River Antwerp. He knew of one town near where he resided which sold \$110,000 worth last year. A raspberry plantation will last for ten years, and is more profitable than the strawberry.

Mr. Thomas said a large raspberry grower told him that the labor of covering the canes in winter, pruning, &c., was fully equal to the labor required in setting out new strawberry beds, and that the latter was fully as profitable as the raspberry.

QUESTION 4. *Is there any practicable remedy for the currant worm?*

Dr. Trimble was called upon, and said *he had never seen the worm?*

Mr. Crane succeeded in killing them with Helibore powder. Only one application was needed.

Mr. Thomas succeeds with white helibore.

Mr. Frost mixed helibore and lime in equal parts, (for the purpose of distributing the helibore.) In twenty-four hours not a worm is left.

Mr. Barry had used helibore in solution with excellent effect,—half a pound in a pail of water and syringed the bushes with it.

Mr. Harris said he believed he was the first person who recommended helibore. Had used it for years. It is an effective remedy when properly applied. But he thought on a small scale the worms might be kept under by going over the bushes early in the season, and killing the flies and the eggs on the leaves. At first the flies deposit their eggs on the suckers and lower branches. The former should be cut out, and hundreds might be destroyed in this way. If any are hatched put on helibore.

QUESTION 5. *What insects and diseases are grapes liable to be attacked by during summer?*

Dr. Trimble exhibited the leaves of grapes affected by a caterpillar which eats them in holes, and also devours the fruit. It is a serious enemy in the cities, where there are no birds. In the country, where there are birds, this caterpillar does little damage.

Charles Downing said his grapes were troubled with thrip.

Dr. Trimble said a strong solution of tobacco would destroy the thrip. He mentioned a case where a hot day (100° in the shade) killed the thrip by the thousand.

Mr. Fisher said that last year he had fine Delaware grape vines that gave promise of producing a splendid crop, but the vines were so affected with thrip that he did not gather a single bunch.

Josiah Salter said that what was called thrip was really "fritters"—the small white fly so common on rose leaves. Tobacco smoke will kill them where it can be confined. A solution of tobacco and whale oil soap applied with a syringe is also an effectual remedy.

QUESTION 6. *Is there any new light on the subject of pear blight?*

Joseph Harris was called upon and said he had no new information to communicate. He still adhered to his former opinion that the blight was caused by a fungus developed in the soil from decaying woody matter, such as the roots of former trees, chip manure, &c.

Several members argued that this could not be the cause of the blight, inasmuch as the disease generally affected the leaves and branches first, descending to the trunk as the disease spread. If it was caused by anything at the roots it was reasonable to suppose that the trunk would be affected before the branches.

[We may remark that this objection is about as reasonable as it would be to contend that indigestion in the stomach could not produce headache, because no pain was felt in the intermediate points—the heart, shoulders, neck, mouth, nose, eyes, &c. If the tree was a dead piece of wood the objection would be a valid one. But when it is borne in mind that the idea is, that the fungus decomposes the sap, it will not seem improbable that those parts of the tree where the growth is more rapid should be affected before the trunk. If poison was introduced with the sap at the roots of a tree, its effects would be first observed in the leaves and branches.]

QUESTION 7. *Do the Seventeen Year Locusts attack fruit trees?*

Hugh T. Brooks said that in Livingston county he was informed that they had destroyed the leaves of apple trees near an oak forest, where they appear to be most numerous.

Mr. Thomas said they were very numerous near Union Springs. Kept up one continual, uniform war. *They never eat leaves.* They puncture the twigs of trees for the purpose of depositing their eggs, and when the twigs are small the hole which they make kills the twig. But they never eat anything while above ground.

Dr. Trimble confirmed this statement. They remain above ground about three weeks depositing their eggs. This is all the damage they do. The eggs will hatch about the 11th of August. They then drop down and burrow into the earth, and attach themselves to the roots of trees. There was a difference of opinion as to whether they were injurious to the trees. It was a common remark that "a locust year was always a good fruit year," which may be owing to the fact that the locusts are not at the roots.

Mr. Thomas did not think they did any harm. Had known an instance where an apple orchard was cut down shortly after the last appearance of the locusts, seventeen years ago, and yet they came out this year from the spot in great numbers—showing conclusively enough that if they suck the sap from the roots of trees, they are at all events able to do without such food.

QUESTION 8. *Is the man who allows the caterpillar to multiply in his apple orchard a good neighbor?*

Mr. Crane said he should vote an emphatic "nay."

Dr. Trimble would go further. Such a man was not only a poor neighbor—he was a nuisance. He hoped this Society and every Agricultural and Horticultural Society in the land would agitate the question till we had a policeman in every town who would bring such a man to justice!

Among the fruit exhibited were forty-three dishes of seedling strawberries raised by the Messrs. Moore, of Brighton, several of which the committee thought possessed decided merits. Ellwanger & Barry showed fifteen varieties of strawberries. Among the newer sorts that were particularly fine, were Belle Artesienne, Bonte de St. Julienne and La Constance. H. E. Hooker & Co., Bronson, Graves & Selover, J. H. Babcock, H. N. Langworthy, Ira A. McCall and others, also exhibited strawberries.



## Young People's Page.

### ANECDOTE OF DR. NOTT, OF UNION COLLEGE.

ON an evening preceding Thanksgiving many years ago, two students left the college, with the most *foul* intent of procuring some of the Doctor's fine fat chickens, that roosted in a tree adjoining the house. When they arrived at the spot, one ascended the tree, while the other stood with the bag ready to receive the plunder. It so happened that the Doctor himself had just left the house, with the view of securing the same chickens for his Thanksgiving dinner. The rogue under the tree hearing some one approaching, immediately crept away, without notifying his companion among the branches. The Doctor came up silently, and was immediately saluted from above as follows:

"Are you ready?"

"Yes," responded the Doctor, dissembling his voice as much as possible.

The other immediately laying his hands on the old rooster, exclaimed:

"Here's old Prex, will you have him?"

"Pass him along," was the reply, and he was soon in the Doctor's bag.

"Here's marm Prex," said the all unconscious student, grabbing a fine old hen, "will you have her?"

"Yes," again responded the Doctor.

"Here's son John, will you have him?" "Here's daughter Sal, take her?" and so on until he had gone regularly through with the Doctor's family and chickens.

The old man walked off in one direction with the plunder, while the student, well satisfied with his night's work, came down and streaked it for the college. Great was his astonishment to learn from his companion that he had not got any chickens, and if he gave them to any one it must have been to Doctor Nott. Expulsion, fines and disgrace were uppermost in their thoughts until the next forenoon, when both received a polite invitation from their President, requesting the presence of their company to a Thanksgiving dinner. To decline was impossible, so with hearts full of anxiety for the result, they wended their way to the house, where they were pleasantly received by the old gentleman, and with a large party were soon seated around the festive board. After asking a blessing, the Doctor rose from his seat, and taking the carving knife, turned with a smile to the rogues and said:

"Young gentlemen, here's old Prex, and marm Prex, son John, and daughter Sal," at the same time touching successively the respective chickens; "to which will you be helped?" The mortification of the students may be imagined.

How can a man, who has no wings, be said to be winged, in an "affair of honor?" Because, in going to fight a duel, he makes a goose of himself.

Why do the patent laws tend to promote discovery? Because they tax invention.

### A SOUTHERN UNION GIRL.

THE following story, from Albert Richardson's narrative of his adventures in Southern prisons, will be read with no little interest:

"We galloped along at Dan's usual pace, with the most sublime indifference to roads—up and down rocky hills, across streams, through swamps, over fences—everywhere but upon public thoroughfares.

"I suppose we had traveled three miles, when Mr. Davis fell back from the front, and said to me:

"That young lady rides very well; does she not?"

"What young lady?"

"The young lady who is piloting us."

I had thought Dan Ellis was piloting us, and rode forward to see about the young lady.

"There she was surely enough. I could not scrutinize her face in the darkness, but it was said to be comely. I could see that her form was graceful, and the ease and firmness with which she sat on her horse would have been a lesson for a riding master.

"She resided at the Union house, where Dan had gone for news. The moment she learned his need, she volunteered to pilot him out of that neighborhood, where she was born and bred, and knew every acre. The only accessible horse (one belonging to a rebel officer, but just then kept in her father's barn), was brought out and saddled. She mounted, came to our camp at midnight, and was now stealthily guiding us, avoiding farm-houses where the rebels were quartered, going round their camps, evading the pickets.

"She led us for seven miles. Then, while we remained in the wood, she rode forward over the long bridge which spanned the Nolichucky river, to see if there were any guards upon it; went to the first Union house beyond to learn whether the roads were picketed; came back, and told us the coast was clear. Then she rode by our long line toward her home. We should have given her three rousing cheers, had it been safe to cheer. I hope the time is not far distant when her name may be made public. Until the rebel guerrillas are driven out from their hiding places near her mountain home, it will not be prudent."

"BILL, give me a bite of your apple, and I will show you my sore toe." Bill did it, for such an overture could not be resisted.

WHEN has a scruple more weight than a drachm? When conscience makes a teetotaller refuse a thimble-full of brandy.

WHY is a comet more like a dog than the Dog-star? Because the comet has got a tail and Dog-star hasn't.

WHEN does a lady drink music? When she takes her piano for-te (tea.) Did you ever?

WHERE are we most likely to find the sky blue? The nearer we get to the milky way.

ANSWER TO PUZZLE.—"Madam."



## Ladies' Department.

### A FEW HINTS ON FASHIONS.

A NEW style of hairdressing is about to be introduced. The front hair and the lower part of the back are cut short, and this short hair is curled and frizzed. The rest is smoothly drawn back and turned under as if to be caught in a net. It is, however, kept in place by five fillets or bands of velvet, which pass over the head from side to side, and are sewed to a band passing under the back hair. This is a Grecian style and extremely pretty. Another style has the aureole of short curls with a long curl behind each ear; the back hair is braided and arranged quite on the top of the head. Instead of the plait a bunch of curls is sometimes substituted, which must also be quite high on the head. The hair is still arranged in a waterfall or Grecian at the back, and very high rolls or Pompadour in front. Bunches of short curls are much worn over the parting in front, also a row of light curls over the waterfall at the back.

With a change of coiffure comes a change in the shape of bonnets, and we are told that these pretty, becoming and comfortable little half-handkerchiefs are to be discarded to give place to a bonnet with high, wide face, and hood-shaped Quaker-like crown. Loud will be the complaints against these bonnets, which we can hardly imagine becoming, and to ladies not favored with height, they will be positively frightful. We hope, however, the change may be very gradual, and that it may be long before Fashion obliges us to wear so voluminous a head gear.

The present bonnets are small, indeed so scant are some of them as not to be seen at all from the front, and just touching the waterfall at the back.

A tuft of flowers with a few loops of illusions is all that is required.

Other styles are made up of French muslin drawn over colored silks and trimmed with ribbon. These are also very pretty. White illusion over shirred silk is also one of the fashionable styles.

Most of the dress skirts are good, and Mme. Demorest's method of goring is as follows: Fold over six inches on each side of the upper part of the front breadth, graduating this down two-thirds of the skirt, baste this down. The next breadth set one inch below at the bottom, and sew the straight edge to the bias line of the front breadth. Fold a gore of eight inches on the farther side of this breadth, and so continue all round the skirt, setting each breadth one inch below at the lower edge. By this method you have a handsomely gored train skirt without cutting up the material. A plain skirt should also have each breadth set one inch longer at the bottom and then trimmed off to form a train. In plaiting, lay one large treble box-plait in the centre of the back, and the rest in flat plaits all alike toward the front. Gored skirts are plaited in clusters of two or three plaits laid deep with a space between. A box-plait in the back and four clusters are sufficient for a skirt.—*Godey's Lady's Book.*

## DOMESTIC RECEIPTS.

Contributed to the Genesee Farmer.

**CURRENT JELLY.**—Pick fine red and large ripe currants from the stems, bruise them and strain the juice from a quart at a time through thin muslin, pressing it gently to get all the liquid. Put a pound of white sugar to each pound of juice; stir it until it is all dissolved; set it over a gentle fire; let it become hot and boil for fifteen minutes; then try it by taking a spoonful into a saucer. When cold, if it is not quite firm enough, boil it for a few minutes longer. It may be made by standing in the sun, without boiling, if put in a very warm place, and is generally of a much better color than when cooked by the fire.

**RHUBARB WINE.**—Dr. Marsh, of the United States Sanitary Commission, gives the following receipt for making rhubarb wine: Peel and slice as for pies; put a very small quantity of water in the vessel, only just enough to cover the bottom; cover the vessel and gradually bring to a slight boil; then strain, pressing out all the liquid; to this liquid add an equal quantity of water; to each gallon (after mixed) add from four to five pounds of brown sugar; set aside, ferment and skim like currant wine; leave in the cask and bulk as long as possible before sending away. All wine is better kept in casks.

**RASPBERRY VINEGAR.**—Take three or four quarts of raspberries, put them in a stone crock and cover them with vinegar. Let them stand twenty-four hours. Then strain this juice through a jelly-bag and pour it on to fresh berries, letting this stand another day. Repeat this process until you have the quantity you desire. Add to each pint of juice one pound of sugar. Put it into a preserving kettle and allow it to heat sufficiently to melt the sugar. When it is cold, put it into bottles. It will keep several years.

**CURRENT WINE.**—One quart of currant juice, two quarts of water, three pounds of crushed sugar, and to each gallon of the mixture add one gill pure brandy. Place a cask upon its side with the bung up, and fill it entirely. It will require replenishing, as it wastes by fermentation, and the cask should always be kept full.

**WINE OR CIDER SAUCE FOR PUDDINGS.**—One cup of sugar and two tablespoonfuls of butter. Beat up thoroughly like hard sauce. Stir in gradually, just before using, a quarter of a glass of wine. Set it in a pan of hot water until softened, and when turned out it will be white and smooth like cream.

**STRAWBERRY WINE.**—Press out the juice from the strawberries, and add two quarts of water to each quart of juice. Loaf sugar is then added at the rate of one pound to the gallon. Put into a barrel in a cool cellar, and ferment in the usual way.

**WEST POINT CAKE.**—One pound of sugar; one pound of flour; one-half pound of butter; five eggs; one cup of sour cream; one teaspoonful of pearl ash.





### The Wool Market.

THE price paid for wool in this section is about fifty cents per pound, and we hear of some large clips that have been sold at this figure, but as a general rule farmers are not disposed to sell at this price, and the market is quite dull.

We were conversing a few days since with one of the most intelligent and experienced wool dealers of this section, and the arguments he used in favor of a lower price for wool than last year, are these:

1st. There is from ten to twenty per cent more old wool in the hands of farmers than usual.

2d. The new clip is nearly twenty per cent larger than last year.

3d. There is an unusually large quantity of foreign wool in the market.

4th. The scarcity of cotton and high prices have stimulated the production of wool all over the world.

5th. There is more cotton now in the South than was anticipated.

6th. Nearly all the foreign wool is imported at a duty of only three cents per pound.

7th. With gold at par, the manufacturers can import foreign wool for fifty cents per pound.

We asked him what were the arguments on the other side. *He did not know of any!* But of course there are some.

1st. Although there is unquestionably a larger amount of last year's wool in the hands of farmers than usual, and though the new clip will be twenty per cent higher than the average, still it is admitted the production of American wool is very far short of the ordinary consumption.

2d. During the war there has been a great increase in the number and extent of woolen factories, and they are still actively engaged and are likely so to continue.

3d. Though the demand of woolen goods for army purposes will not be as large, yet the "boys" who are coming home, will not be likely to wear their thread bare uniforms for any length of time. They will want new clothes and they have the money to pay for them.

4th. It is true that "the manufacturers made the tariff." But still there is a duty on wool worth over twenty-four cents per pound, but which has been reduced by admixture of dirt, &c., to eighteen cents, or nine cents a pound, payable in gold. Now such a duty on wool reduced so that three pounds is only equal to one, would have to pay a duty of twenty-seven cents in gold, which at 140 is equal to 37½ cents currency.

5th. Though there is undoubtedly much cotton in the Southern States, very little has been brought to market, and the price is still very high and is likely to continue so for some time.

6th. Gold is still at 140, and if foreign wool cannot be imported for less than fifty cents in gold, this would be equal to seventy cents in currency. But so far as we can ascertain, foreign wool of good quality cannot be obtained for fifty cents in gold.

It appears to us that the price of wool will depend almost entirely on the price of gold. In other words, the price at which foreign wool can be imported fixes the price of domestic wool, and as the former is paid for it in gold, the price of wool will depend pretty much on the price of gold. Were it certain that gold would keep up to 140 for the next six or eight months, we feel sure that the manufacturers would buy our wool freely at 70@75 cents per pound. The money market is easier than it has been since 1861, and this will favor the purchase and holding of wool.

As we stated last month, the Ohio Wool Growers' Association voted to hold their wool at eighty-five cents. We are inclined to think this is too high. We think 65@70 would be nearer the mark for ordinary domestic fleece.

### New Advertisements.

AMONG the valuable articles advertised in this number of the *Farmer* we would call particular attention to Hickok's Cider Press, manufactured by W. O. Hickok, of Harrisburgh, Pa. Also to Cook's Evaporator for making sorghum sugar, manufactured by Blymyer, Bates & Day, of Mansfield, Ohio. It is the best apparatus of the kind we are acquainted with.

The "Horse Fetters," advertised by Joseph Briggs, of New York, we have not seen, but presume they are good, and they are certainly a useful thing on a farm.

Haines & Pell, the well-known agricultural implement dealers and manufacturers of New York, offer their valuable Mowing Machine, Horse-Rakes, &c., at "reduced prices." Send for one of their circulars.

J. M. Thorburn & Co., of New York, offer a fine list of turnip and other seeds wanted at this season. There is no better or more reliable seed house in America.

### The Markets.

IN this section the crops are unusually good. The wet weather of the last few days it is thought will rust the wheat badly, and the midge will probably injure it considerably, but however bad this may be for individual farmers, it can scarcely affect prices to any material extent.

Prices will be determined on the demand for breadstuffs in the Southern States and in Europe, and on the price of gold. The latter still keeps up to 140, and this will give us prices forty per cent higher than would otherwise be the case. Freights, too, to Europe are unusually low, and this is also favorable. We think prices in gold will be higher than they were last year, and it is thought that the growing ease in the money market will keep up the price of gold.

### A Beautiful Picture.

WE have received from the publisher, W. J. Holland, of Springfield, Mass., an exquisite engraving entitled "The Child's Prayer," which we cannot too highly commend to our readers. See advertisement in this number of the *Farmer*.



### Notes on the Weather from March 1, 1865, to June 1, 1865.

JANUARY and February were cold months, giving us a temperature considerably below the general average. No part had been so cold as we have often known, and only once below zero; but the whole had been uncommonly cold.

March gave us a change, and the mean was above the general average 2.3°. The sleighing had been good, and a large body of snow was on the ground. This began rapidly to melt, and just after the middle of the month by rain and heat still more rapidly. By the 17th the Genesee Valley Canal was overflowed by the rise of the Genesee, and the south and west part of the city was flooded. The flood increased till noon of the 18th, when its desolation was terrific. Since the flood, it is easy to recall the great damage suffered by our city. Spring came on rapidly in the last half. The mean heat of the month was 36.8°, and its general average 32.4°.

Not much snow fell in the month; but the water of snow and rain measured 3.17 inches. The soft maples and common elms flowered about the middle of the month, and fully in the last week.

April was still warmer. In the first half the mean was to the general average as 47.3° to 41.2°, and in second half as 47.9° to 44.1°, making the month quite warm, and advancing the season rapidly. The early flowering plants and the grass and wheat were forward and very promising. Considerable wind; a thunder shower on the 6th at 10½ to 11 P. M. Water in the month 3.03 inches; frost on the 17th. Rain, hail, and snow near midnight of the 24th. Early cherries in flower in the yards on the last week. Shod-blow in blossom, and hard maple also on 25th.

The means of the heat of April range from 37.6° to 52.9°, while the general mean for twenty-nine years is 44.1°, and for this April is 47.9°, or 3.8° above the general average. Only once in twenty-nine years has April given a higher mean temperature—in 1844.

May was a little cooler in proportion in its first half, but the heat of the month was greater than the general mean as 57.1° to 56.3°. The cool winds from the cold Lake Ontario have been considerable, and May has not seemed quite so pleasant. The season has not advanced so much in proportion. Indian corn was in good part planted, though the rains have left considerable of it to be yet done. Still, the grass and wheat show that harvest must be somewhat earlier. Lilacs blossomed on the 16th. Apples, pears, plums, were then in flower; peaches gone. Rain in the month 3.30 inches. Fine thunder shower on 21st at 5 to 6 P. M. Water of the spring months 9.50 inches.

Ice-burys in the passage to England in the middle of May. Hotter weather at the South.

Hottest day in May, 16th, 73°; hottest noon, 83° on 17th; coldest day 42° on 11th and coldest morning, 38° on 12th.

Spring has had a good reputation. The prospects from gardens and fields are fair and joyous. Good is the prospect wide over the land.

### Inquiries and Answers.

**BACK VOLUMES OF THE GENESEE FARMER—PRICE OF WOOL, &c.**—This is the first year I have taken the *Genesee Farmer*, and I should like to know whether you have the back volumes for sale. If so, I would like to purchase them after I sell my wool. *Will wool keep down in price?* I like your "Walks and Talks on the Farm." I frequently get more information from one of these talks than from the ——— and the ——— in their four issues for the month.—JOSEPH KEWING, *Adrian, Ohio, May 19, 1865.*

We can furnish you the six last volumes of the *Genesee Farmer*, (1859, '60, '61, '62, '63 and '64,) substantially bound, with an index to each volume, for \$5.00.

In regard to the price of wool, it is not safe to predict. There is unquestionably a large stock in the hands of farmers, but as the premium on gold still continues high, and is likely to continue so for some time, and as we shall not get a full supply of cotton for a year or two at least, and as there is a high duty on foreign wools, it would seem that wool ought to bring at least 50 per cent. more than its average price before the war, when gold was at par, cotton abundant and cheap, and we were importing a large quantity of foreign wool at low duties. Of course there will be a great effort to keep down the price till the new clip has passed out of the hands of the farmers; and as the wool-dealers have lost heavily on last year's purchases, they will not be inclined to buy so largely the present season. Still money is abundant, and wool is an article that will keep. It is always a safe rule to hold anything that will keep, when the price falls below the cost of production.

**MILDEW ON GOOSEBERRIES.**—Would you be kind enough to inform me through your paper of a remedy for mildew on gooseberries. Also, if there is a way for raising tomatoes very early without making hot-beds, as they seem to produce more vines than fruit? By answering the foregoing, you will much oblige—Mrs. JOHN MILLER, *Galt, C. W.*

We know of no certain remedy for mildew on the gooseberry. In this section, the culture of the fine English varieties has been pretty much abandoned, on account of their liability to mildew. Good culture and mulching in summer are the most approved preventives. We think, too, that sulphur scattered on the bushes before the mildew makes its appearance, or *immediately* afterwards, would have a good effect. The mildew on the gooseberry and the mildew on the grape belongs to the same species, and as sulphur is a *certain* cure for the latter, it is highly probable that it will at least check the former. We hope Mrs. M. will try it.

We have never had much success in raising early tomato plants without a hot-bed. Sowing them in a box of light soil, and keeping them in a moderately warm room, with as much sunshine as possible, promises the best success. When the plants are well started, and become too crowded in the box, they should be transplanted into small flower pots, or into other boxes. Keep the leaves well sprinkled, as the great difficulty of growing plants in a room is the dry atmosphere.

**SUPERPHOSPHATE FROM BONES.**—I have a lot of raw bones which I am very anxious to use on turnips the coming summer, if there is any way that I can dissolve them. If you can tell me how to do it, you will greatly



oblige me. I suppose they may be dissolved with sulphuric acid, but do they not sustain a great loss by being burned first?—C. A. WHITAKER, *Hancock, N. H.*

Yes, you lose half the value of the bones by burning. Bones contain gelatine equal to about five per cent. of ammonia. This is all driven off and lost. And even after you have burnt the bones, you cannot make a good article of superphosphate without grinding the burnt bones. Neither can you make a good superphosphate from raw bones without first grinding them. There are those who say they have succeeded in dissolving large bones, but we have never seen a good article produced in this way. If there is no mill where you can get them ground, you had better crack them up by hand and put them under grape vines, dwarf pear trees, &c., and buy a barrel or two of superphosphate for your turnips.

**TURNIP DRILL.**—You speak highly of a system of drilling turnips on ridges, and mention a drill that will sow two rows at a time, drilling in superphosphate, plaster, &c., at the same time. Now if you know where such a drill is made, I should like to obtain one. Do you think it is better to sow on ridges or on the flat?—BUCKEYE.

Such drills are made in Canada, but we have not, as yet, been able to ascertain the name of the manufacturer. Where several acres of turnips are grown, such drills are indispensable.

We think it is better to sow on ridges. Of course they should be rolled down before the seed is sown. The drill alluded to has a roller in front of the seed sprouts, and a lighter one behind for covering the seed. One of the advantages of sowing on ridges, is that the horse-hoe can be used nearer the plants than when drilled in on the flat. In the latter case, the young plants are liable to be smothered by the soil thrown on to them by the cultivator.

### Literary Notices.

**THE YOUNG GARDENER'S ASSISTANT.** By THOMAS BRIDGEMAN. New York: WILLIAM WOOD & Co. 1865.

Even when the theory of gardening is well understood, a novice in the practice finds himself often at a loss for the counsel of some person who has experienced the same difficulties and has found a way out of them. This book is intended to fill just that place, and does it as well as a book can. The author is a practical man, and tells in a simple way precisely what a "young gardener" wishes to know. It treats of almost every subject on which information is needed for the successful culture of the kitchen and flower garden. We have examined it particularly with reference to vegetables, and in that department it is an exceedingly valuable, practical work. A table is given of all the ordinary vegetables, showing whether they are hardy or tender, whether the seeds are slow or quick in germinating, capable or not of being transported, and whether moisture or heat is most essential to their growth. A list of seeds is given, with the amount of space that an ounce or a pound will sow—information very valuable to persons who for the first time are ordering their seeds. The directions for forcing are excellent, though they apply rather to the climate of New Jersey than the more northern winters of Western New York; but as the author gives his standpoint, it is easy to make the necessary changes for a colder season.

The flower garden occupies a considerable space, and orchard and fruit management is also treated on. The monthly calendar is very good, and gives many useful hints.

**SERMONS ON ABRAHAM LINCOLN:** With the Funeral Services at Washington. Boston: J. E. TILTON & Co.

This little volume contains thirty-four sermons by different divines of Boston on that sad occasion. No book expresses better the sentiment of the North than this. It is well worth reading, as nearly all the sermons were preached under the immediate influence of the painful excitement attending the melancholy event.

**INSECTS ENEMIES OF FRUIT AND FRUIT TREES.** By ISAAC P. TRIMBLE, M. D. New York: WILLIAM WARD & Co.

This is a most valuable treatise on the curculio and apple moth—subjects vital to the interests of every fruit-grower, and who now is not a fruit-grower? As the author says: "The health of your trees and your crops of fruit depend upon how successful you are in subduing the Insect enemies. If they are conquered, all who plant trees and manage them with reasonable care can have fruit." And in no way can this victory be rendered certain except by a thorough acquaintance with the habits of the insects, from the worm to the moth, and back to the moth again.

The author of this work has studied the habits of the insects treated of, most faithfully and minutely. His directions for destroying them are not empirical, but are founded on the basis of a thorough scientific knowledge. He does not even insist that his way is the best, but only that it is one way which, in his own case, has always proved successful—leaving each person to draw their own conclusions from the facts which he so accurately states. The illustrations are numerous and well drawn, adding much to the value of the book.

## ADVERTISEMENTS.

A FEW short advertisements of interest to farmers—and only such—will be inserted in the GENESEE FARMER at twenty-five cents a line, or \$2.50 per square, or \$25 per column, each insertion, payable in advance.

### HALL'S AGRICULTURAL WORKS, Rochester, N. Y.

THE undersigned, Executors of the estate of Joseph Hall, deceased, will continue to manufacture the celebrated

**HALL THRESHING MACHINE AND POWER,** which for execution and style of workmanship stands unrivalled Also,

**Collin's & Shattuck's Combined Clover Machines,**

the easiest running machine made, capable of threshing, hulling and cleaning at one operation.

For information apply by letter or otherwise.

F. W. GLEN, } Executors.  
M. E. HOLTON, }

Rochester, N. Y., June 26, 1865.

jylt

### SAWING MACHINES.

WE are building a GREATLY IMPROVED CROSS-CUT SAWING MACHINE for cutting logs into stove wood, with two or four horse powers to drive them.

Also, a new style CIRCULAR SAW for cutting cord wood into stove wood.

Circulars describing our machinery sent promptly on application by letter. Write to JONAS W. YEO, my4t Proprietor Robinson Machine Works, Richmond, Ind.

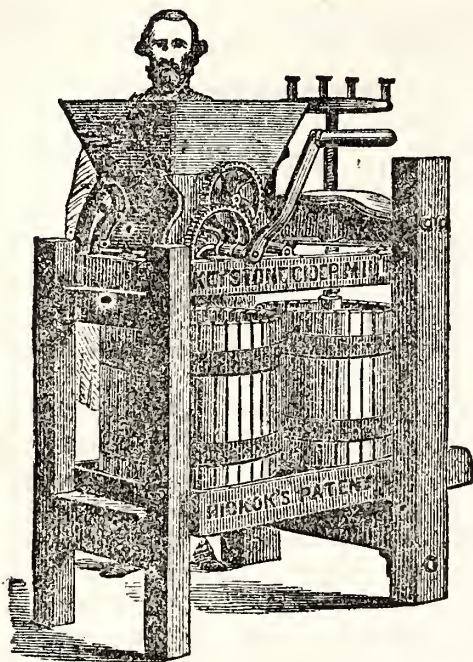
**\$125 A MONTH!**—Agents wanted everywhere to introduce the improved Shaw & Clark \$20 Family Sewing Machine, the only low price machine in the country which is licensed by Grover & Baker, Wheeler & Wilson, Howe, Singer & Co., and Bachelder. All other machines now sold for less than forty dollars each are infringements, and the seller and user are liable to fine and imprisonment. Salary and expenses, or large commission, allowed. Illustrated circulars sent free. Address SHAW & CLARK, Biddeford, Maine. ju 3t

**CIDER PRESS SCREWS**—Five feet long, four inches diameter. These powerful screws bring out a third more juice than portable presses. Send for a circular. Made by THOMPSON & CARPENTER, Poughkeepsie (N. Y.) Foundry. ju2t



**THE CHAMPION.  
HICKOK'S PATENT PORTABLE  
KEYSTONE CIDER AND WINE MILL.**

**12,000 in Use and all Approved.**



**T**HIS admirable machine is now ready for the fruit harvest of 1865, is made in the most admirable manner with either one or two tubs, and is well worthy the attention of all persons wanting such a machine. It has no superior in the market, and is the only mill that will properly grind grapes.

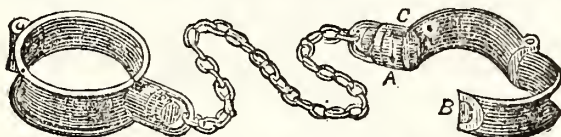
**For Sale by all Respectable Dealers.**

I also make two sizes of superior

**Presses for Berries, &c., &c.**

If your merchant does not keep them, tell him to send for one for you, or write for one yourself. Address the manufacturer, jy4t

**W. O. HICKOK, Harrisburg, Pa.**



**New Patent Animal Fetters.**

**J**UST the thing that farmers need for fettering Horses, Mules, and cattle, when turned out to pasture, to prevent jumping, running, escape, or damage. They are made of malleable iron, light, strong, and not liable to get out of order.

Price, \$2 50. Dealers in Hardware and Agricultural Implements, &c., please forward their names for full description and prices to the trade by the dozen, to

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335 Broadway, New York.**

**A PARTNER WANTED.**

**O**WING to advancing years and increasing business, the senior partner of a well established and popular Nursery wishes to retire and put in his place an active, practical Nurseryman, who can bring letters of credit for industry, sobriety and honesty. To such a person an opportunity is offered rarely to be met with, as no money will be required (if desired,) until the profits of the business will furnish it.

For particulars inquire of

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Fort Wayne, Ind.**

June 15, 1865.

**THE BEST AND CHEAPEST FARMING  
LANDS IN THE WHOLE WEST, ARE THOSE OF  
NORTHERN MISSOURI.**

**R**EBELS are moving away, and are selling for whatever they can get. An extensive immigration from the Northern States and from Europe already begun, will soon occupy that part of the State and develop its immense natural wealth. Free and full information given on application to

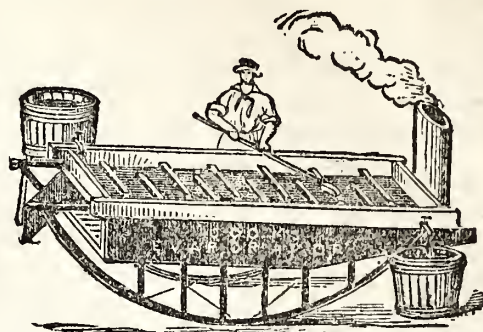
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**PIONEER SORGO MACHINERY.  
COOK'S EVAPORATOR.**

**8000 IN USE.**

**All Warranted.**



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**NOT ONE**

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**"S**IMPLE affair. Operates admirably. The best apparatus." *American Agriculturist.*

"Of all the Evaporators we have seen, the most satisfactory results are from Cook's.—*Prairie Farmer.*"

We manufacture PANS for BRICK ARCHES (on the Cook principle) at about one half the price of the Evaporator. SORGO HAND BOOK sent free.

Parties wishing the agency for the Cook Evaporator and the Clark Sorgo Machine Co.'s Mills, should direct to our address:

**BLMYER, BATES & DAY,**

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**THE "VICTOR" CANE MILLS.**

**TRIUMPHANT AT STATE FAIRS.**

**Only Mill with National Reputation.**

**DIAGONALLY BEACED—LAPPED GEARING—OIL-TIGHT STEP BOXES,  
FLUTED FEED ROLL—FLANGED MAIN ROLL—NO KEYS USED.**

"New principles are introduced, by which the choking is prevented, and one-third of the power saved. The operation was very striking—one horse pressing one-fourth more cane, bringing out the bagasse dryer, and gaining one-sixth in revolution over the other Mills driven by two horses. The committee awarded it the **FIRST PREMIUM.**—(At the Ohio State Fair.)—*Cleveland Leader.*"

We also manufacture all sizes of **HORIZONTAL MILLS.** Our Mills embrace no less than eleven different patents, which cover about every excellence attainable in a Mill.

Illustrated pamphlet sent free.

**CLARK SORGO MACHINE CO.,**

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**116 Main street, Cincinnati, Ohio.**

**SUPERIOR FARM LAND!—20,000 ACRES AT  
LOW PRICES AND ACCOMMODATING TERMS.**—Franklinville Tract, Gloucester county, New Jersey, 25 miles south of Philadelphia on railroad running from Philadelphia and Camden to Cape May. In lots to suit purchasers. Circulars, with reports of **OLON ROBINSON**, Hon. **WM. PARRY**, and others, with full information, sent free, by addressing **JOHN H. COFFIN & CO.**, Franklinville, Gloucester county, New Jersey. Also, improved Farms from 20 acres upward. ap6t

**BEECHER'S PATENT  
VENEER FRUIT BASKET.**

**A**FTER one season's thorough trial of the **VENEER FRUIT BASKET**, we offer it to the trade with the full assurance that nothing of the basket line now in market can compete with it in its adaptability to the wants of fruit-growers. For durability and style our Basket has no superior, and for strength and cheapness no equal.

For circulars of description, &c., address

feb6t

**A. BEECHER & SONS, Westville, Conn.**

**\$70 A MONTH!**—I want Agents everywhere, at \$70 a Month, expenses paid, to sell Fifteen Articles, the best selling ever offered. Full particulars free. Address **OTIS T GAREY, Biddeford, Maine.** ju 8t



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4 Feet Machine from \$170 to \$145.  
4 1-2 " " " \$190 to \$170.

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HARVESTING TOOLS

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THE LITTLE GIANT MICROSCOPE!

IS A NEW MAGNIFIER, of high power, for the examination of Living or Dead insects, Flowers, Seeds, Minerals, and thousands of other objects, and can be carried in the pocket or attached to a watch-chain. Price, \$1.

Beautiful Mounted Objects, \$1 per box.  
Sent, prepaid, on receipt of price. Liberal terms at wholesale.  
Address GEORGE MEAD, Thompsonville,  
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Also, the new and beautiful folding

POCKET STEREOSCOPE.

which makes pictures look large and life-like. Price, \$2. Choice Stereoscopic Views, \$3 per dozen. Sent everywhere, prepaid.

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WILL PURCHASE a sure and effectual means for taming the

MOST VICIOUS HORSES.

Also, a thoroughly approved method for taking GAME and FISH.

Many successful trials have proved the above to be NO HUMBUG.

Send to J. B. WILLIAMS,  
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SUPERPHOSPHATE OF LIME,  
BONE DUST AND MEAT AND BONE COMPOST.

MANUFACTURED BY

TASKER & CLARK,

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THE manufacturers offer their Superphosphate to the public confident that it will be found equal to any similar article now in the market. Being made from finely ground bones (not burned), Peruvian guano, and other ingredients having manurial properties, it has been found a superior fertilizer for wheat, grass, &c., &c. Price \$65.00 per tun at the factory.

MEAT AND BONE COMPOST.—A valuable manure from refuse meat, bones and other offal from the slaughter-house. Price \$40 per tun.

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This Paste, employed as a Sheep Wash, according to the directions furnished by the Company, has the effect of curing Seab and other cutaneous diseases, and destroying all parasitic insects which infest the skin and wool of the Sheep, and thereby improves the health of the animal, as well as the quality of its fleece. Employed in the same way, the solution being made stronger, it will destroy those insects which infest the skins of larger animals, and also those that are injurious to vegetation.

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feb9t

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THIS SCIENTIFIC and SELF-TEACHING system, which is being ordered by the thousand and sent to every part of the Union, consists of nearly one hundred copies on self-explaining card-board copy slips, and will guide the learner to an elegant command of the pen without schools or teachers. Terms, post-paid to all parts of the Union, \$1.50. Terms to Teachers and Clergymen, \$1.

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WE are manufacturing one of the most successful Two-Rowed Planters now in use. One man and horse can plant either in rows or checks from 10 to 12 acres per day, and do the work well. The machine is easily managed, and is of light draft for one horse. It is one of the greatest labor-saving machines of modern invention. Patented August 14th, 1860.

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Please order early. Several orders came too late last year to be filled.

Orders with cash will receive prompt attention. A liberal discount made to merchants and agents.

For further description, send for circular.

ap5t WHITESIDE, BARNETT & CO., Brockport, N. Y.

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### IN AMERICA.

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First Premium Over All Its Competitors, wherever tested. The Combined Thresher and Cleaner that **CLEANS EQUAL TO ANY FANNING MILL**, fit for mill or market.

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For price and description send for Circulars, and satisfy yourself before purchasing. R. & M. HARDER, ju 2t Cobleskill, Schoharie Co., N. Y.

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Nos. 14 & 16 Green Street, Ground Floor,

NEAR CORNER OF STATE STREET,

Albany, N. Y.,

HORACE L. EMERY, Sole Proprietor.

THE subscriber takes pleasure in announcing that after an absence from the city and country of nearly two years, he has returned and assumed the entire interest in and to the Stock, Business and Interests of the **ALBANY AGRICULTURAL WORKS**, situated on Hamilton, Liberty and Union Streets, and also of the **AGRICULTURAL WAREHOUSE AND SEED STORE** on State Street, and continues the business of the same solely upon his individual account and management. He has greatly improved and increased his facilities for manufacturing, and is better than ever prepared to supply all articles in his line, of a superior quality and upon the most reasonable terms.

He has also REMOVED the entire Stock and Fixtures of the **WAREHOUSE AND SEED STORE** from the old stand in State Street, up stairs, to Nos. 14 & 16 GREEN STREET, and replenished the stock of Implements and Seeds, with the best of its kind, all of which he offers to the public upon the most reasonable terms.

Having been the pioneer in the business of introducing, manufacturing and selling of improved Agricultural Machinery and Implements and Seeds in this city, and devoted twenty years here to the business, he solicits a continuance of the liberal patronage heretofore enjoyed by him and his successors in these Works and business.

HORACE L. EMERY, Sole Proprietor and Manager of the Albany Agricultural Works, Warehouse and Seed Store, Hamilton, corner Liberty and Union streets, and Nos. 14 and 16 Green street, near corner State street, Albany, N. Y. ju 2t

## "Cayuga Chief Mower and Reaper,"

WITH

### "YOUNG'S IMPROVEMENTS,"

FOR 1865.

Manufactured ONLY by

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Examine closely before buying, as there are others building the Cayuga Chief without "YOUNG'S IMPROVEMENTS."

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WE CAN FURNISH **BASS BARK**, prepared for budding, of excellent quality, for 30 cents per lb., or \$25 per 100 lbs. Cash orders solicited.

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RAW BONE  
SUPER-PHOSPHATE OF LIME.

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MANUFACTURERS AND PROPRIETORS,

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After this date, June 12th, the price of BAUGH'S RAW BONE PHOSPHATE will be reduced to \$60 per 2000 lbs. (3 cents per pound) packed in good bags and barrels and delivered free of portage to any wharf or depot in this city.

SEND IN THE ORDERS EARLY.

Already the indications point to a very heavy trade in our article for the fall season, and although we have immense facilities for meeting a large demand with a prompt supply, we would strongly advise Farmers and Dealers to give us their orders as early as possible.

BAUGH'S RAW BONE PHOSPHATE

has now been before the Agricultural community for many years under ONE NAME and ONE PROPRIETORSHIP, and needs no further commendation than that accorded to it everywhere, in the continued and successful use by practical and discriminating farmers. Manufactured only by

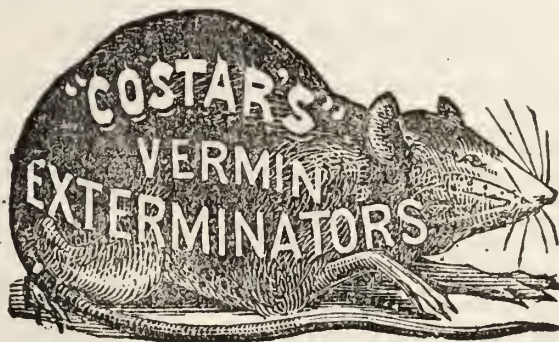
BAUGH & SONS,

No. 20 SOUTH DELAWARE AVENUE,  
PHILADELPHIA.

We recommend Farmers to purchase of their nearest Agricultural Dealer. jy2t

1865.

1865.



"18 years established in N. Y. City."  
"Only infallible remedies known."  
"Free from Poisons."  
"Not dangerous to the Human Family."  
"Rats come out of their holes to die."

"Costar's" Rat, Roach, &c., Exter's,

Is a paste—used for RATS,  
MICE, ROACHES, BLACK and  
RED ANTS, &c., &c., &c., &c.

"Costar's" Bed-Bug Exterminator,

Is a liquid or wash, used to  
destroy, and also as a pre-  
ventive for Bed-Bugs, &c.

"Costar's" Electric Powder for Insects,

Is for MOTHS, MOSQUITOES,  
FLEAS, BED-BUGS, INSECTS ON  
PLANTS, FOWLS, ANIMALS, &c.

Sold by all Druggists and Retailers everywhere.

!!! BEWARE !!! of all worthless imitations.

See that "COSTAR'S" name is on each Box, Bottle, and  
Flask, before you buy. HENRY R. COSTAR.

PRINCIPAL DEPOT, 482 BROADWAY, N. Y.

Sold by all Druggists in Rochester, N. Y. jy8t

U. S. 7-30 LOAN.

THIRD SERIES,

\$230,000,000.

By authority of the Secretary of the Treasury, the undersigned has assumed the General Subscription Agency for the sale of United States Treasury Notes, bearing seven and three-tenths per cent. interest, per annum, known as the

SEVEN-THIRTY LOAN.

These Notes are issued under date of June 15th, 1865, and are payable three years from that time, in currency, or are convertible at the option of the holder into

U. S. 5-20 Six per cent.  
GOLD-BEARING BONDS.

These bonds are now worth a handsome premium, and are exempt, as are all the Government Bonds, from State, County and Municipal taxation, which adds from one to three per cent. per annum to their value, according to the rate levied upon other property. The interest is payable semi-annually by coupons attached to each note, which may be cut off and sold to any bank or banker.

The interest at 7.30 per cent. amounts to

One cent per day on a \$50 note.

Two cents " " " \$100 "

Ten " " " \$500 "

20 " " " \$1000 "

\$1 " " " \$5000 "

Notes of all the denominations named will be promptly furnished upon receipt of subscriptions.

The Notes of this Third Series are precisely similar in form and privileges to the Seven-Thirties already sold, except that the Government reserves to itself the option of paying interest in gold coin at 6 per cent., instead of 7 3-10ths in currency. Subscribers will deduct the interest in currency up to July 15th, at the time when they subscribe.

The delivery of the notes of this Third Series of the Seven-Thirties will commence on the 1st of June, and will be made promptly and continuously after that date.

The slight change made in the conditions of this THIRD SERIES affects only the matter of interest. The payment in gold, if made, will be equivalent to the currency interest of the higher rate.

The return to specie payments, in the event of which only will the option to pay interest in Gold be availed of, would so reduce and equalize prices that purchases made with six per cent. in gold would be fully equal to those made with seven and three-tenths per cent. in currency. This is

THE ONLY LOAN IN MARKET

Now offered by the Government, and its superior advantages make it the

GREAT POPULAR LOAN OF THE PEOPLE.

Less than \$300,000,000 of the Loan authorized by the last Congress are now on the market. This amount, at the rate at which it is being absorbed, will all be subscribed for within four months, when the notes will undoubtedly command a premium, as has uniformly been the case on closing the subscriptions to other Loans.

In order that citizens of every town and section of the country may be afforded facilities for taking the loan, the National Banks, State Banks, and Private Bankers throughout the country have generally agreed to receive subscriptions at par. Subscribers will select their own agents, in whom they have confidence, and who only are to be responsible for the delivery of the notes for which they receive orders.

JAY COOKE,

SUBSCRIPTION AGENT, Philadelphia.

May 15, 1865.



"Now I lay me down to Sleep."

PAINTED BY HOLFELD,

AND ENGRAVED BY

A. B. WALTER.

IS NOW READY FOR SUBSCRIBERS.

From many notices of this engraving, we select the following:

[From R. W. A. Stearns, President of Amherst College.]

Your lovely picture, so suggestive of tender memories, can hardly fail to encourage that early habit of prayer which all good men realize as indispensable to a worthy life. I hope it may have an extensive circulation, and bring blessings to many a Christian home.

[From Rev. Ray Palmer, D. D., Albany, N. Y.]

Thanks for the "Child's Prayer" so admirably represented to the eye. A glance at it is enough to carry one nurtured in a Christian home, back to his mother's knee. The picture is happy in conception and beautifully executed. One can almost hear the "Now I lay me down to sleep," etc., in the sweet and tender tone of childhood. It is well to bring the aid of art to the enforcement of the lesson of early piety in this impressive and unexceptional way. I trust that many a family may enjoy the benefit of this picture as a daily monitor.

[From Joseph Cummings, President Wesleyan University, Middletown, Conn.]

The "Child's Prayer" is a beautiful picture, suggestive of tender, elevating, and refining influences and associations. It should be popular, and is worthy of a place in every family.

[From Rev. John T. Pressley, D. D., Alleghany, Pa.]

The "Child's Prayer" is a picture of singular beauty and loveliness. While as a production of art it is a fit ornament for the parlor. As a moral instructor it deserves a place where it may engage the attention of every household. We have here presented to our view a most lovely object, in the most interesting attitude. And while the contemplation of it cannot fail to minister pleasure to the cultivated taste, it is well adapted to awaken in the mind appropriate moral reflections.

[From Rev. Wm. M. Paxton, Pittsburg, Pa.]

I take great pleasure in expressing my admiration of the picture, the "Child's Prayer," which you were kind enough to send. It is certainly a very fine piece of art, and the more I study it the more I feel its moral power. I shall have it framed and placed where my children can see it just as their eyes open in the morning, and as they close at night. The educational influence of such a picture is inestimable, and I should be glad to see one in every family.

[From Rev. I. C. Pershing, Pres. Pittsburg Female College.]

A beautiful picture, embodying one of the simplest and yet one of the most sublime verses in the English language. Such works of art link the beautiful and the good, and bring home and heaven near to each other. To the little ones of every family it is worth a thousand fold its cost. It is worthy a place in every household.

[From Rev. S. D. Phelps, D. D., New Haven, Conn.]

I am greatly pleased with the exquisite and beautiful engraving of the "Child's Prayer." The subject is one of interest in every household, calling forth the sweetest sympathies, and awakening the tenderest recollections. It is an admirable and charming picture, and must carry a sacred and sunny influence into every room whose wall it may adorn.

Agents Wanted in every Town.

SOLD ONLY BY SUBSCRIPTION.

ADDRESS

W. J. HOLLAND, Publisher

1t

Springfield, Mass.

The Genesee Farmer for Six Months.

TERMS FOR THE HALF VOLUME,  
Commencing with the July Number.

SINGLE Subscriptions, Fifty Cents each. Five Copies for Two Dollars, or Forty Cents each.

PREMIUMS! PREMIUMS! PREMIUMS!

1. To every person sending us *five* subscribers at our lowest club rates of forty cents each, we will send, prepaid by mail, a copy of the *Rural Annual and Horticultural Directory* for 1865. **25 cents.**

2. To every person sending us *ten* subscribers at our lowest club rates of forty cents each, we will send, prepaid by mail, a copy of *Miner's Domestic Poultry Book*. **50 cents.**

3. To every person sending us *fifteen* subscribers at our lowest club rates of forty cents each, we will send a copy of the *Manual of Agriculture*. **\$1.50.**

4. To every person sending us *twenty* subscribers at forty cents each, we will send a complete set of the *Rural Annual* for the years 1856-7-8-9-'60-'61-'62 and '63, handsomely bound in two volumes, with complete index, title page, &c. **\$2.50.**

5. To every person sending us *twenty-five* subscribers at forty cents each, we will send a copy of *The Horse and His Diseases* and *Everybody's Lawyer*. **\$3.00.**

6. To every person sending us *thirty-six* subscribers at forty cents each, we will send a complete set of the *Genesee Farmer* for the years 1860-'61-'62-'63 and '64, handsomely bound, with title page, index, &c., complete. **\$5.00.**

Money may be sent by mail at the risk of the publisher. If the papers do not come by return mail, write again, so that if the money is lost the matter may be investigated at once. Address

JOSEPH HARRIS,

Publisher and Proprietor Genesee Farmer and Rural Annual,  
June 1, 1865. ROCHESTER, N. Y.

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SOLD BY ALL DRUGGISTS.





VOL. XXVI. SECOND SERIES.

## WALKS AND TALKS ON THE FARM.—NO. 20.

MESSRS. GIBBUD BROS., of Waterbury, Conn., sent me to-day a sample of their "magic binder." It consists merely of a small cast-iron hook, with a piece of tarred twine attached. The twine is put round the sheaf and drawn into the hook, which holds it tightly in its place. The Messrs. G. say that one man, with this contrivance, can bind as much as four with the ordinary wheat band. This, I should think, is somewhat doubtful. If it would save one-half the labor, or even one-quarter, it would pay for itself twice over. I took it into the field where the men were binding wheat. It ties up the sheaf to perfection, but the men said they could do it quicker in the ordinary way. But then they say so of *everything* that is new, no matter how valuable it may be. The other day I sent to the Remingtons for a couple of Flanders' adjustable grain cradles. They are acknowledged, I believe, to be the best cradles in the country. As I was bringing them home I offered to bet ten dollars that the men would say that they "were not as good as the old ones." Well, after dinner, I saw three or four of them congregated round the cradles, swinging them at imaginary wheat, balancing them on their hands and examining them with a great air of critical wisdom. What the general verdict was I do not know, but just as I got up I heard one of them say, "Give *me* the old 'un"! And so it always is. I have never known an exception. It is part prejudice and part awkwardness. It takes a little while to get "the hang" of any new implement. Last year I got one of Sayre & Remington's horse hoes and not a man would use it unless compelled to do so. This year we have used it almost every day in the corn and potatoes, and they prefer it, and the Johnston cultivator, to all others. It will be so with the cradles next year. In fact one of the men has already had the courage to say, "they are the neatest cradles I ever see." But why this prejudice? What is the cause of it? Is there anything in the country air that engenders it, or the fresh stirred soil? Of course it cannot be ignorance, because we find some

quite respectable farmers who are not entirely destitute of the same disposition.

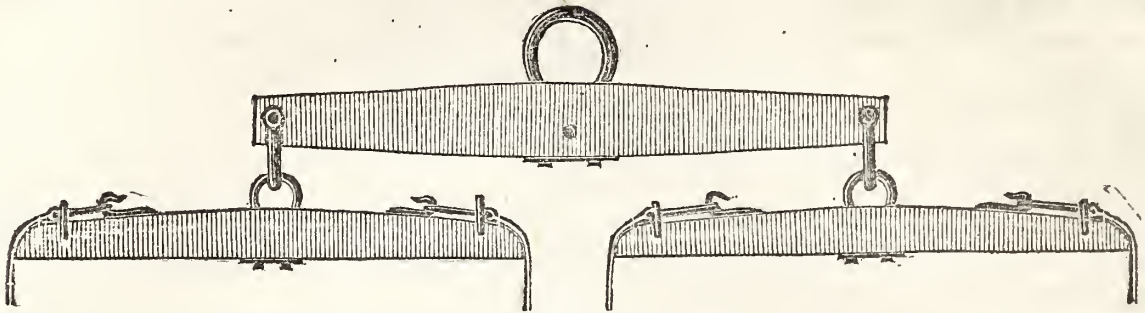
The weeds got the start of me among the carrots. In all other crops I managed to keep ahead, though it has been a bad season for killing them. We cannot afford to be without carrots, at least as an occasional feed for horses; but I am inclined to think they cost more than any other root. They are so slow in coming up that more or less hand weeding is absolutely necessary—and when you have to pay from six shillings to a dollar a day for Dutch women, the less of such work one has to do the better.

I have half an acre or so of parsneps which are splendid. They are excellent for milch cows in the spring, yield abundantly, and germinate and grow quicker than carrots, and consequently require less labor in weeding, and what is a point of considerable importance, they can be left in the ground all winter and dug in the spring as wanted. But the only root crops which can be profitably grown on an extensive scale as food for stock, are mangold wurzel, and the Swedish and common turnips. The whole labor of cultivation and weeding can be done with the cultivator and hoe. It seems, however, that there are still some farmers who have not discovered the best way of thinning out turnips. *They do it by hand!* It is double the labor and not half as good as thinning them out with the hoe. You require a hoe that is straighter in the shank than they are usually made, and the better way is to push it from you through the rows of turnips rather than to pull it towards you. In fact you require both motions. Push it boldly through the turnips, leaving a bunch of two or three plants and then with the return stroke of the hoe thin them out to a single plant. They should not be left closer than nine inches or a foot apart in the rows. The great error is in leaving the plants too thick. There are few people who have sufficient courage at first to dash the hoe straight through a nice lot of young plants, leaving only one where there was a dozen and this one in rather a forlorn looking condi-



tion. It will, however, soon revive and grow all the better for the rough treatment it has been subjected to. It is a common opinion in England that the young turnip plants grow best when they have so little hold of the soil that the wind can blow them about. Like corn, you cannot cultivate and hoe turnips too much when young.

was fully as heavy as the first crop. This was left to rot on the ground. It formed a good coat of manure, and the best crop of grass that has been grown on the farm for many years is the result. There are few crops that pay so well, for the labor and expense involved, as a good piece of grass that will give say two tons of hay per acre. It is seldom



Mr. J. D. Weaver, of Penfield, N. Y., asked me this spring to try a couple of his "improved orchard and farm whiffletrees." The tug is passed round the end of the whiffletree and is fastened behind, so that the tugs are really wider than the whiffletree. In plowing among trees they are certainly a great improvement over the ordinary whiffletrees; and I like them very much for cultivating among corn when it is large. Like all really valuable inventions it is a very simple one, and the wonder is that no one has thought of the arrangement before.

Last winter mill feed sold in the city for \$42 per ton. I was offered it to-day for \$15, and the miller remarked that it might be cheaper in a short time. The crop of hay is undoubtedly large, though I think not so large as is generally supposed, and straw and coarse fodder of all kinds will be unusually abundant. This will keep down the price of mill-feed, and this has a tendency to lower the price of wheat. The New York papers express the "fear" that high prices of farm produce may become "chronic." But no such fears are entertained among farmers. We hope never again to see prices as low as they were before the war. We need higher prices. It would be better for the farmers and better for all classes, for it is a fact that the prosperity of the nation depends very greatly on the prosperity of farmers. Agriculture in this country has never been as lucrative as trade, and it is much to be desired that we should have a higher range of prices.

The grass on the north meadow this year is splendid. We have cut about three acres and have drawn in eight loads. Last year the crop was not over half a ton to the acre. It so happened that I could not pasture it last fall, owing to the fact that there was some corn on part of the field. After harvest we had abundant rain, while the first part of the season was very dry. I think the after grass

that hay sells in the city for less than fifteen dollars a ton, and it is frequently twenty dollars. The only drawback is that where you sell your hay you are likely to soon impoverish your land, and it is not every farmer who has the "knack" of feeding stock to advantage.

Among the multitude of machines used in American Agriculture it is a matter of surprise that the wheat hoe, so common in England, has not been introduced. The reaper has compelled us to free our land from stones and stumps, and there is now no impediment in the way of the wheat hoe. That it is greatly needed, there can be no doubt. Look at the red-root and Canada thistles which abound in so many wheat fields. The horse hoe would destroy them, and at the same time mellow the soil and increase the growth of the crop.

The main difficulty in the way in this section is the almost universal practice of seeding the wheat with clover in the spring. But in such a spring as the last the wheat might have been hoed before the clover was sown. But, admitting that this is not generally the case, will not the advantages of hoeing the wheat warrant us in changing our system of rotation?

I would like the opinion of farmers in regard to the following rotation on wheat farms in this section. It is merely a suggestion. There may be objections to it that do not occur to me:

First—The land must be rich enough to bring wheat on a clover sod turned over just previous to sowing. This is almost the universal practice in England, and the only objection I can see to its adoption here is that we sow our wheat a month earlier, and it may be that if we should have a drouth in August the land might be too dry for good plowing or for germinating the seed.

Second—Drill in the wheat and hoe it in the spring to kill the grass and weeds.

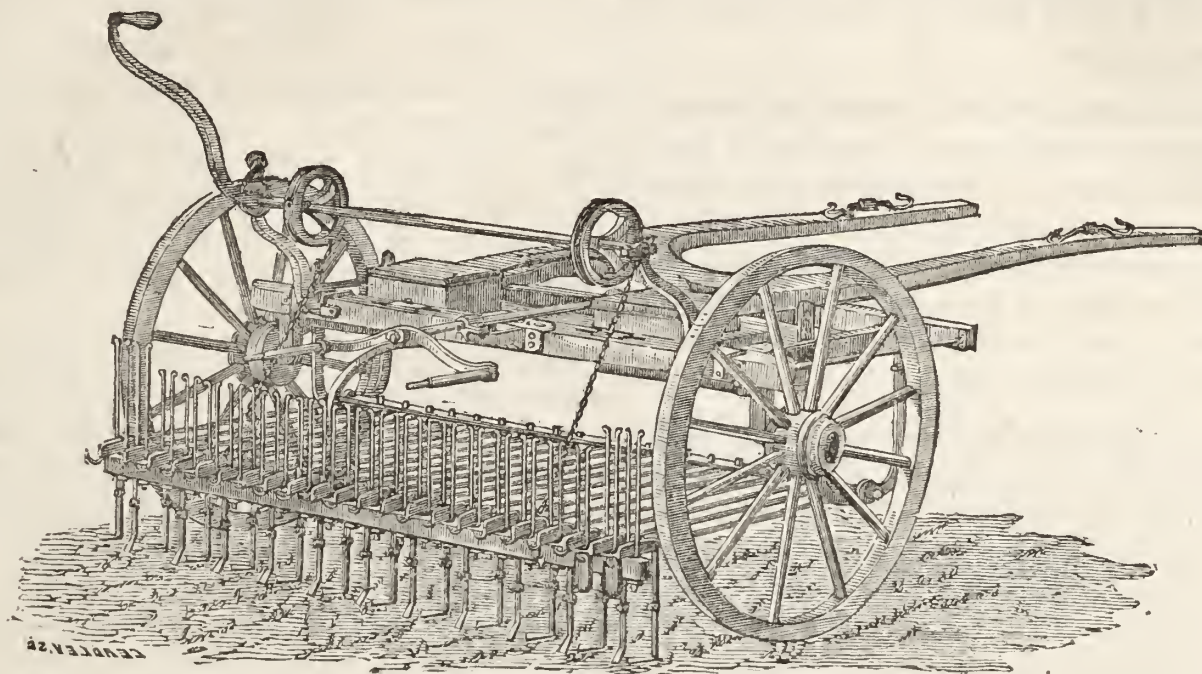
Third—After the wheat is harvested plow the



land, and if it is very foul harrow and cultivate it as occasion may offer. Then before winter sets in plow it again and leave it in the rough for the frosts to mellow it. Then in the spring plow it again once or twice as may be necessary, and cultivate and harrow till every weed is destroyed and the land is as fine as a garden.

Fourth—Plant corn or potatoes or beans, and keep the cultivator constantly at work between the rows. If the previous culture has been thorough, there will be no need of hand hoeing; the cultiva-

tor as the wheat was off, I plowed the land, and a few weeks later harrowed it; then plowed again; and again in the spring, followed by the harrow and cultivator. Then plowed again and cultivated and harrowed till the quack was brought to the surface, when I raked it together in heaps and burnt it. I then planted beans two feet five inches apart, and a handsomer crop I never saw. There was a little quack left, but the Johnston cultivator soon used it up. There was about an acre in this field that was in orchard, and which had not been plowed for three



tor and horse hoe will do all that is needed and will mellow the soil far deeper and better than it can be done with the hoe.

Fifth—After the corn is off, plow the land and let it lie till spring. Then, without again plowing, simply using a two or three horse cultivator or gang plow, sow barley and seed it down—and if you could use a little artificial manure on the barley, to give it a good start, so much the better.

The advantages of this system are: 1st. The land gets a thorough cleaning once in four or five years without the necessity of a summer fallow. 2d. Most of the work is done in the autumn and spring rather than during the hot weather. 3d. The corn, potatoes or beans need little or no hoeing, while the land will be very warm and mellow at planting time, thus ensuring what is so desirable for the corn crop, an early and vigorous start.

It is a general opinion that corn or beans require less hoeing on a freshly inverted sod than on stubble land. This is true if the stubble is only plowed once, but if it is plowed, as I propose, three or four times and thoroughly cultivated and harrowed, far less labor will be needed to take care of the corn than on the sod land. This I have found to be the case the present season. I had a wheat stubble that was full of quack grass. I determined to kill it. As soon

as the wheat was off, I plowed the land, and a few weeks later harrowed it; then plowed again; and again in the spring, followed by the harrow and cultivator. Then plowed again and cultivated and harrowed till the quack was brought to the surface, when I raked it together in heaps and burnt it. I then planted beans two feet five inches apart, and a handsomer crop I never saw. There was a little quack left, but the Johnston cultivator soon used it up. There was about an acre in this field that was in orchard, and which had not been plowed for three

or four years. I turned it over and planted beans with the rest of the field. Now the beans on this sod land require at least twice as much labor in hoeing as those on the other part of the field. I conclude, therefore, that the reason why sod land is considered better for hoed crops is owing to the fact that when they are planted on stubble land little pains are taken to make the land clean before planting.

But about the Wheat Hoe. I have heard doubts expressed as to the feasibility of running it between the rows without cutting up the wheat. But a moment's reflection will show that it is not so difficult to guide the hoe as one would at first imagine. The hoes are of equal number and operate at equal intervals with the system of spouts in the drill. And as the hoe is run on precisely the same width of land sown with the drill, any irregularities in the rows would extend the whole width of the horse hoe. All that you have to do is to see that the blades of the hoe in one of the drills are guided aright and you are sure that all the rest will run in the rows.

I have just had an engraving of the English Wheat Hoe made for the *Genesee Farmer*, and I do hope that some of our Agricultural implement manufacturers will shortly bring out something of this



kind. At our "International Wheat Show," in Rochester two years ago, Mr. A. B. Travis, of Brandon, Mich., exhibited a machine for hoeing wheat, which was said to do the work well, but we had no opportunity of trying it at that time. Whether he is now doing anything with it or not, I do not know.

Mr. John S. Collins, of Morristown, N. J., sent me a few days ago a box of blackberries, which were certainly very nice. He writes me that it is a variety which originated in Burlington county, N. J. It commences ripening from five to ten days earlier than the New Rochelle, is more productive and of better flavor.

It seems to me there are an unusual quantity of blossoms on the potato vines this season. I never saw potatoes look better, and I suppose the blossoms are an indication of vigorous growth. The Doctor thinks I ought to pluck them off, on the theory that they rob the tubers. I have no doubt that such is the case and that it would pay to pull off the blossoms before they go to seed.

When is the best time to cut peas? The books all say they should be cut with a greenish tinge. Wheat, barley, oats and corn will ripen after they are cut, but how far the pods of peas will fill out from the juices in the vines after they are cut, I cannot ascertain. There seems to have been no experiments on this point. However, I mean to cut mine as soon as the lower pods are quite ripe, even should the tops be still green. Were the seed the only object, I presume it would be better to let them get pretty ripe, even at the risk of losing some of the earliest pods from shelling, as you would get more peas from the ripening of the green pods than you would lose from the shelling of the over-ripe ones. But when the haulm is intended for fodder it is better to cut with a greenish tinge. If well cured, pea vines make excellent fodder, especially for sheep. They are "second only to hay." In fact pea *straw* contains more nitrogen than the *grain* of wheat, barley, oats or Indian corn. A good crop would give a ton and a half of straw per acre.

In regard to the best manner of harvesting peas I wrote to John Johnston, and he replies:

"I think you would harvest your peas best with the mowing machine; and keep a revolving hay rake following, the horse going on the cleared ground half of the rake would make as wide as the machine would cut. Of course you would have to keep men putting that raked, out of the way for the horses the next time round. The first round would require to be mown by hand. I have seen a crop of barley taken up without loss in this way that was as flat laid as it could be. I saw my neighbor, Mr. Noyes, take up three acres of peas and of large growth with the revolving horse rake with but little loss, but he had to let them get so ripe that the value of the fodder was greatly lessened."

Mr. Johnston has just thrashed his twelve acres of winter barley, and had six hundred bushels. He sowed two bushels per acre, but thinks he should have had more barley had he sown only a bushel and a half.

Wheat is a *pleasant* crop. It is a pleasant crop to put in; pleasant to see it cover the ground in autumn; pleasant to see it grow in summer; pleasant to look at as it whitens for the harvest; pleasant to see a good self-raker lay it down in sheaves ready for the binders at the rate of ten acres a day; pleasant to "pitch" on to the load; pleasant to thrash and get ready for market, and if you have a good crop and obtain a good price, it is not *unpleasant* to receive the money for it.

But a poor crop of wheat, "spotty" in the spring, with a liberal mixture of thistles and red-root, and about one-third of the wheat "turned to chess," has a tendency to depress the spirits and to favor the idea that "farming does not pay."

My wheat this year is on the whole better than I expected, but by no means as good as I hope to have it in a few years. I feel sure that we can raise as good wheat in the "Genesee Country" as in the palmiest days of old. I have not seen a single midge in my whole crop of wheat this season. It is what they call "amber weevil proof." It is a bald wheat, in color about half way between the white and red varieties, medium length of straw and ripens a little earlier than the Mediterranean. The farmer I got it from raised thirty-three bushels per acre last year.

One of my neighbors who has been acquainted with the farm for many years offered to bet last fall that he would have more wheat from eighteen acres than I should from forty acres. I did not take the bet. "You will have good wheat on the summer fallow," he said, "but I presume you are prepared for a poor crop on your barley land and after the peas." Now it so happens that my summer fallowed wheat is the lightest crop, while that after barley is decidedly the best I have. The summer fallow was an old sod that had not been plowed for thirteen years. I broke it up in July, and as the weather was very dry the sod did not rot. I plowed it however, again, just before sowing and managed to get it in in pretty fair order. Had the sod been thoroughly rotted, I have no doubt it would have given a heavy crop. I presume, should I sow it again to wheat this fall, it would produce a better crop next year. But as there is considerable red-root in the wheat I shall plow the land this fall, and then plant corn next spring, and, with the free use of the cultivator, I think this treatment will kill the red-root. But is it not curious that red-root should spring up so thickly on land that had not been plowed before for a dozen years or more? The seed must have lain in the ground all this time.

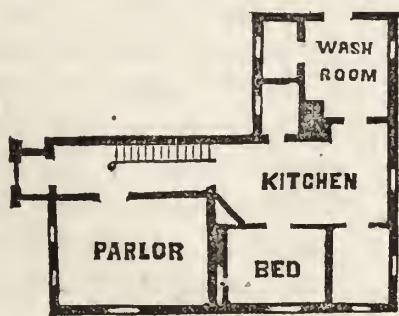


## HOW TO ALTER A "COUNTRY HOUSE."

THE author of *My Farm of Edgewood* has had several very interesting articles on country houses and their surroundings, showing that he fully appreciates the trials, as well as the pleasures of country life, and his advice about country houses is most admirable. He gives a fascinating picture of what a time-honored farm house, with its door of oak studded with nails, opening across the centre, and its low ceilings with projecting beams, may be changed into without altering its characteristic look of age, and making it "smart" when it should be venerable.

Such houses, though common in New England and the older Eastern States, are, as a general thing, quite unknown even no farther west than Western New York, and we doubt whether a dozen of our readers west of this State know how an old fashioned door opening across the centre looks; and the only house that they have ever seen with beams projecting through the ceiling was built of logs and not found capable of much ornamentation, except of vines outside and by the open fires within. Mr. Lackland's house, which "could boast of no respectability of age," is much more like the majority of those which farmers are to try to improve. He says:

"The height of its rooms was of that medium degree which neither suggested any notion of quaintness nor of airiness. Its entrance hall was pinched and narrow; its stairway inhospitably lean, and altogether its appointments had that cribbed and confined aspect which to one used to width and sunshine, was almost revolting. The wash-room was positively the only apartment below stairs which had a southern aspect. I give his drawing of it,



and it is a good type of a great many "small and convenient houses" scattered through our country towns.

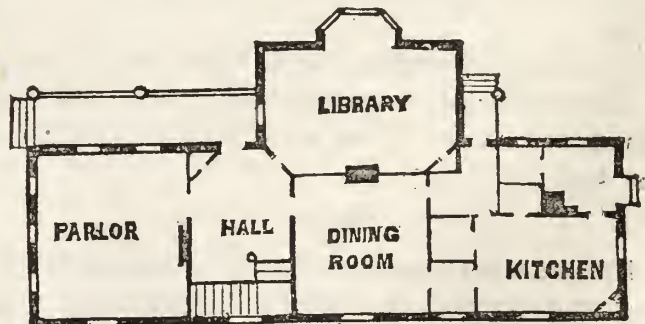
"Of course this will never do," wrote Lackland to me, "and yet the skin of the house (as our carpenter calls it) is very good, and I wish to make the needed changes so far as possible, without disturbing the exterior outline of the main building. But how shall I rid myself of that preposterously narrow entrance way in which I can almost fancy Mrs. L., (who is something large) getting wedged on some

warm day? How shall I throw light into that dismal parlor? You will perceive that along the whole south front there is not a single available window below. Now, half the charm of a country place, to my notion, lies in the possession of some sunny porch upon which the early vines will clamber, and under whose eaves the Phœbe birds will make their nests. I want too, my after dinner lounges at a sunny door, where I can smoke my pipe, basking in the yellow light, as I watch the shadows chasing over the grass. About the stupid little design I send you, there is neither hope nor possibility of this.

"Mrs. L. and myself have scored out an incredible number of diagrams—all of which have been discussed, slept on, admired and eventually condemned. Sometimes it is the old pinched entrance way that works condemnation; sometimes (on my part) the lack of sunny exposure; and oftenest (on hers) the lack of closets. She insists that no man yet ever planned a house properly on this score. She doesn't see clearly (being deficient in mathematics) why a closet shouldn't be made in every partition wall. She don't definitely understand, I think, why a person should thwack his head in a closet under the stairs. She sometimes (our carpenter tells us) insists upon putting a window through a chimney; and on one occasion (it was really a very pretty plan) contrived so as to conduct a chimney through the middle of the best bed room; and the best scheme of all, to my thinking, positively had the stairs left out entirely.

"In this dilemma, I want you to tell us what can be done with the old shell, so as to make it passably habitable, until we find out if this new passion for country life is to hold good."

Upon this I ventured to send him this little plan of adaptation, which, though not without a good many faults that could be obviated in building anew, yet promised to meet very many of their wants, and gave to Lackland his sunny frontage:



"Here you have," I wrote him, "your south door, and porch to lounge upon, and your south bow window to your library, which, if the rural tastes grow upon you, you can extend into a conservatory, covering the whole southern flank of the apartment. The parlor, too, has its two south windows, and al-



though I should have preferred to place the chimney upon the northern side, to the exclusion of the window there, yet it seemed best to make use of the flue already established. The hall is well lighted from the north, and will give room for the hanging of any of your great-aunt's portraits, if you have any.

"There is an objection to traversing the dining room in going from the kitchen to the hall door; but it could not well be obviated, with the existing shell of your house, without reducing the size of the dining room too much, or (another resource) without increasing largely the dimensions of the hall—throwing the intervening space between it and kitchen into store rooms and making the library do duty for the spread of your table.

"The dining room moreover, having only north exposure you may condemn as dismal. I propose to obviate this, and to give it a cheerful south light by an extravagance which I dare say the architects will condemn, but which will have its novelty and possible convenience.

"The fire places of library and of dining room, are, you observe, back to back. Now I would suggest that the two flues be carried up with a sweep to either side (uniting in the garret) in such sort, that a broad arched opening shall be left above the mantel from one room into the other. This may be draped, if you like, with some tasteful upholstery; but not so far as to forbid a broad flow of the warm light from the bow window of the library; while upon the mantles of even height, you may place a Wardian case that shall show its delicate plumes of fern between your table, and the southern sunlight all winter long. It would moreover be quite possible, owing to the breadth of partition wall afforded by the two flues, to arrange folding shutters for the complete closing of the arch-way whenever desired. For my own part, I love such little novelties of arrangement, which mark a man's house as his own, however much they may put the carpenters to the gape.

"Paint with discretion; avoid white, and all shades of lilac—the most abominable color that was ever put upon a house;—you can't match the flowers, and don't try, I beg."

To illustrate the saving of labor by the use of low carts, the English *Agricultural Gazette* says a man in spading will turn over about one hundred tons of earth per day. If he had to throw it over the side of a cart or wagon five or six feet high, he could not handle more than one-fifth of the weight he lifted in the first place. Consequently, for every foot the cart is lowered a fifth part of the labor will be saved.

## RANDOM TALK ABOUT POULTRY.

WRITTEN FOR THE GENESEE FARMER BY C. N. BEMENT.

**MERIT OF FOWLS.**—Like human beings fowls are susceptible of being influenced by change of climate, dirt, soil, and water. They require a little care until they become acclimated, which they never fail to be after a time; but it is unfair to condemn them as tender or unfitted for any particular locality, because a trial of a few months has not been satisfactory. Their habits should be studied. Some bear confinement without injury, others require a range. Their properties are so different that every one may be suited if he will only take the trouble and ask proper information.

**DOMESTIC FOWLS HAVE THEIR PECULIAR WHIMS.**—When they are compelled by rain, snow, or some frost to take shelter during the day, they do not retire to their dormitory—the hen-house where they roost at night, but prefer some other building to which they can have access, and use as a drawing-room, and from which they will adjourn to roost when the proper time comes.

**KEEPING FOWLS.**—The most important requisite for keeping fowls on a large scale, is to begin with a moderate number and feel one's way, and increase as the business will warrant. To commence with any business on a large scale one does not well understand is almost sure to result in extensive losses, if not failure. It requires some time and experience for any one to discover the various avenues to money-making, which are likely to lead to the best profits, and to be most free from losses.

**POULTRY KEEPERS**—May be divided into two parts; those who keep for fancy, and those who keep for profit. These again may be divided into two; those who keep fowls—first, because it is the fashion; and afterwards with an object in view, like a young man who smokes—because others do.

Those who wish to keep fowls and desire to be successful, should have a distinct building facing the south or southeast, as the morning's sun is congenial to them in cold weather; and a yard set apart for them, should be constructed according to the purposes of the proprietor. He who keeps a cock and six or eight hens merely for home supply, will require a very simple arrangement.

**KEEPING POULTRY.**—One of the principal objects of keeping fowls by a private family is to have *fresh* eggs. The time for the hens to lay eggs depends much upon the warmth in which they are kept, and therefore, in general, on the season. There are two seasons or periods of the year when poultry lay most; these are spring and autumn. Cold retards or prevents this, hence scarcity of eggs in winter. March pullets of the Asiatic tribe will often commence laying when five or six months old, and to them should we look for hardy layers.



IN THE HATCHING OF POULTRY, nature is the best guide, and all arrangements made for the accommodation of the hen should conform as far as possible to the example which nature sets before us. Hens in a state of nature make their nests on the ground. This method, however, cannot at all times be acted upon. The best mode of making the nests of sitting hens is of pine leaves, which offer a medium between the natural habits of the hen and the dryness of a wood-box filled with straw. The pine leaves also afford the hen an opportunity of freeing herself from those insects which are frequently so troublesome to hens when sitting.

EGGS FOR HATCHING.—The number of eggs to be placed under a hen is dependent on the size of both eggs and hen; an odd number, from eleven to thirteen is to be preferred, as being better adapted to the covering of the nests, thirteen are enough, though a very large hen might cover more, but a few stronger well hatched chickens are better than a larger brood of weaklings, that have been delayed in the shell perhaps twelve hours over the time from insufficiency of warmth. At the end of a week, it is usual with sitting turkeys to add two or three hens eggs, "to teach the young turkey to pick." The plan is not a bad one; the activity of the chickens does stir up some emulation in their larger brethren. The eggs take but little room in the nest, and will produce two or three very fine fowls.

HEALTH OF FOWLS.—The good health of fowls may be known by the fresh and florid color of their combs, and lightness and dryness of their eyes, the nostrils being free from any discharge, and the gloss of the plumage.

FATTENING FOWLS.—Though in general fowls when in health, will become sufficiently fat by having plenty of food, with air and exercise, yet they are sometimes fattened for market by keeping them in confinement, with abundance of food and little light, so that in fact they have nothing to do but eat. It is a common practice with some to coop their fowls for a week or two, under the notion of improving them for the table, and increasing their fat; a fact, however seldom succeeds, since the fowls generally pine for their loss of liberty; and slighting their food, lose instead of gaining additional flesh. Such a period is in fact too short for them to become accustomed to confinement. It takes several weeks to fatten fowls confined in coops. The prevention of light by inclining fowls to a constant state of repose except when moved by the appetite for food, promotes and accelerates obesity; but such a state cannot be a state of health, nor can the flesh of animals so fed equal in flavor, nutriment and salubrity that of the same species fed in a more natural way. Economy and market interest

may perhaps be the best answered by the place of darkness and close confinement; but a feeder for his own table, of delicate and ambitious of furnishing his own board with the choicest and most salubrious viands, will declare for the natural mode of feeding.

EXPERIMENT IN FEEDING CHARCOAL TO FATTEN POULTRY.—Four turkeys were confined in a pen and fed on meal, boiled potatoes and oats. Four others of the same brood were also at the same time confined in another pen, and fed daily on pulverized charcoal mixed with meal and potatoes. They had also a plentiful supply of broken charcoal in their pens. The eight were killed on the same day and there was a difference of one and a half pounds each in favor of the fowls which had been supplied with charcoal, they being much the fattest, and the meat greatly superior in point of tenderness and flavor.

POULTRY RUNNING AT LARGE.—Domestic fowls running at large do much better than they will if restricted to narrow limits in the coop or yard. Their health is improved, their flesh is better and finer and better tasted, and they will produce more eggs at large than in confined situations. The turkey in particular is a strenuous advocate of the largest liberty. Hens in a garden are a pest and a nuisance, but there is no necessity of being troubled with them. A common picket fence six feet high will effectually exclude them; it being well known that fowls rarely attempt flying over such a fence, and when made plain, such a fence costs perhaps as little as almost any other.

FEEDING FOWLS.—In a state of nature, fowls run over a great extent of ground before they get a crop full. They pick up their food, grain by grain, and with it small pieces of dirt, blades of grass, and other things, that all help digestion. Placed before the fowls in boxes filled with grain, the birds do in five minutes that which should be the work of two hours; they eat a greedy fill, and suffering unnatural repletion, they have recourse to drink, the corn swells in the crop, and the sufferers instead of walking about cheerfully, hide in corners and squat about to the detriment of their health. This applies to the equally bad practice of throwing down the food in heaps.

ONIONS FOR POULTRY.—Scarcely too much can be said in praise of onions for fowls. They seem to be a preventive and remedy for various diseases to which domestic fowls are liable. Having frequently tested their excellencies, we can speak understandingly. For gapes and inflammation of the throat, eyes, and head, onions are almost a specific. We would, therefore, recommend giving fowls, and especially the young chicks as many as they will eat, as often as twice or three times a week. They should be finely chopped. A small addition of corn meal is an improvement.



## FARM AND GARDEN.

WEEDS are a terrible pest, and an unceasing warfare must be made upon them or they get the ascendancy, and will then have their own way. Many farmers go through grain crops pulling out the weeds and thus prevent the seeds ripening and spreading upon the land. Oat fields may now be attended to, and the weeds taken out without injury to the growing grain. Weedy meadows should be cut first, especially those overrun with white daisy. This is a very troublesome weed, and when it once gets possession of the soil is hard to eradicate. In passing through the country we see many fields completely covered with this bad weed, and often where there is evidently no pains taken to keep it in check. Lands overrun with daisy do not yield half a crop of grass, and are worth but half so much as adjoining fields of the same quality of soil that are free from weeds. If farmers would join together in neighborhoods and make war in earnest upon the daisy, it could soon be forced from the soil. Where there are but few stalks these should be pulled up by hand but where the number is very considerable they may be kept in check by early mowings, and then by heavy manuring, and the use of plaster and other fertilizers may be completely subdued and exterminated.

We have tried this plan with success. The daisy does not make its inroads upon farms in extensive patches at one time. It creeps in slowly and stealthily here and there, hoping to get a permanent foothold before the farmer is aware of its bad character. It is thus early that the weed is easily overcome, but no half way work will accomplish the business. Our plan is to sow clover, manure heavily with barn yard manure, and then plaster; by this course we get a large growth of grass, and "choke the critter off."

One of the worst pests in cultivated grounds on the black slate lands of Herkimer, is quack or couch grass. It soon gets possession of the soil and grows with remarkable vigor. When it fairly gets into the land the labor of getting it out by cultivating and hoeing is of no ordinary character—at least we never enjoyed the sport of hoeing it to death.

A few years ago it got possession of one of our fields, and we battled with it after the following manner: We commenced plowing and harrowing early in June, and continued the work every eight or ten days, until in July, when the piece was rather heavily sown with buckwheat. The hot sun came down and roasted the roots, hauled out upon the surface with the harrow, they gave up the ghost, and what remained the buckwheat smothered to death. A nice large yield of buckwheat was the result of that year's cultivation, and the next season we had a clean mellow piece of ground, with not a vestige

of quack in any of its parts. Doubtless in damp, wet seasons, this could not be so thoroughly effected, since many of the roots on the surface would catch and grow, instead of being rooted out.

The hot dry weather of July and August, is a good time to destroy many kinds of weeds, and advantage should be taken of this time to destroy as many as possible. It is true one requires a large share of courage to make the attack on a large and weedy farm, and men do not often get credit for their efforts in this direction. We have seen one man fighting weeds with all his might, while his neighbor seemed to take pleasure in growing them, for the winds to scatter myriads of seeds back again over the farm. We suppose there is no law to reach these cases, and yet there ought to be for the shiftless neighbor is morally guilty of a species of robbery which should be recognized in our statute books.

Some western people are wiser than we of the east, on this weed question. In Wisconsin they have a law making it finable for any man suffering certain kinds of weeds to go to seed on his premises, and any one has a right to complain and bring the offender to justice.

Perhaps the day may come when we of the east will become far enough advanced in weed-civilization to have such a law in force. Indeed there is reason to hope so, since we have made one progressive step recently in getting the cattle out of the highway, although we may think this a sad infliction.

The New York Cheese Manufacturers' Association, at their late annual meeting in this city, passed a vote of thanks to those Legislators who were instrumental in getting a milk law. This is all right. Good acts should be recognized and services rendered appreciated, and it would not have been out of place if agricultural societies had made some recognition of the services of those who gave us the blessing of having cattle excluded from the highways.

This weed question is an important one, since also neglect and carelessness on the part of many, are entailing immense waste and injury to some of our best lands. It is true the destruction and extermination of weeds is an expensive work but then it is not money entirely thrown away since the land is generous and willing to pay back something in increased crops? But one, after a while, gets tired of fighting weeds when farmers about him sow by the help of the winds a little faster year after year than he can destroy. We recently looked over a nice farm, where the large meadows were white with daisies, and the proprietor remarked that he had fought the weeds for years, keeping his meadows clean, but that his neighbors sowed faster than he could destroy, and



so he gave up in despair and let the weeds have their way. This is only one instance out of many, and we begin to hear it asserted that daisy fodder is not so bad after all, for the herds will eat it and thrive. Of course they will eat it when nothing better is presented, but then admitting the point, see the largely increased quantity of land required to winter a cow. These daisy lands are the ones that yield one-half, three-fourths or a ton to the acre, while it takes the clean meadows of timothy or clover to turn out crops of two, three, and four tons. This point, at least, should not be lost sight of.—*Utica Herald*.

#### NOTES BY S. W.

##### THE DAIRY REGIONS OF NEW YORK.

A late letter from Chautauque county says: \$50,000 a week is now paid out in that county for butter at 30c. a lb. to send to New York city. Here in grain-growing Seneca, butter is selling at 25c. a lb. at the groceries for home use; it will not stay sweet long enough to compete with Chautauque butter in the New York market. Every dog must have his day, and the high cool moist grass regions have it now, as butter and cheese bear a much better market price comparatively than any of the cereal grains. Two cheese factories within four miles of each other have just commenced in the town of Gerry; at one of them 6,570 lbs. of milk made eleven cheeses in one day, cheese 16 inches deep, and the same in diameter; the other factory makes broader and thinner cheese of 80 lb. each. They have much more rain and less frequent drouth in Chautauque than in Seneca county.

##### A NEAT FARMING REGION.

Here is a man from Holmdel, New Jersey, who says our farming compares very unfavorably with that in the best parts of New Jersey. Every farmer there on the light soils, enriches his domain with green sand, marl and manure; every waste thing is appropriated for manure, by this means the roads are denuded of weeds and thistles, and the whole country blooms in fruition. It is sad to confess that in all arable, fertile Western New York, even nature's bounties are all allowed to run to mischief; not only our roads and fields are filled with weeds, but the streets of the villages and the borders of the Railroads abound in Canada thistles, rag weed, &c. Yet thousands of dollars are raised by a corporation tax in this village, a great part of which is wasted in buying sand and hauling it at great expense to make our hard clay streets into a more adhesive mortar. The only argument in favor of such waste is that it employs the laborer, and eats up the taxes.

##### A SANDY SOIL THE BEST FOR A GARDEN.

It is true that a clay loam if mechanically treated

with decomposing manure will stand a long summer drouth if the surface is hard, better than a sandy soil even if well manured. But this is almost the only real advantage of an alluminous over a sandy soil. If sand requires more nitrogenous manure to keep up its fertility, a light top dressing of clay will do much to prevent the escape of the manurial gasses. Then it is so much more easily worked and quicker to start early vegetation, that it saves in time and garden labor much more than it loses in manure. I take it that it takes at least twice the labor to work a clayey garden, than a sandy one.

But if I was going to grow a crop of Indian corn on a wager, regardless of labor and expense, I would choose a tenacious soil instead of a sandy loam. If the season was wet, I might be distanced, but I should be sure to win in a protracted summer drouth. To do this, coarse rich manure must be placed in early, and the surface must be kept loose with the cultivator all through the season; this would mulch the soil, prevent its cracking open, and enable it to hold moisture, but on the other hand the more land is stirred in hot weather the faster it loses moisture.

##### PIE PLANT, OR RHUBARB.

The pie plant requires deep and heavy manuring to begin with, and liquid manure occasionally to enable it to yield heavily. Its tendency is to increase in roots, and decrease in the size of its leaves after the third year. Hence it should be dug up after the third or fourth year; the root then should be divided, and single crowns set out for new plants. It is so tenacious of life that the root will sprout in a compost heap after they are chopped into small pieces.

##### THE REASON WHY PASTURES ARE BETTER IN THE HIGHER DAIRY REGIONS.

From a record of the thermometer range, and the amount of rain fallen, kept by a brother in Chautauque county, town of Gerry, I find that they have at least four times as much snow in winter, and twice as much rain during the summer months as we have in Seneca. Our meadows, owing to the heavy spring rains are perhaps not much behind those of Chautauque; but our pastures particularly after the 1st of July will not compare with those of the high land regions, east or west. This season our hay crop will be above the average in spite of the early June drouth as the old sward-bound meadows do not abound in this grain-growing region; but although we have had rain enough for the corn and summer crops, pasture is becoming short from the lack of soaking rains. I find it better to buy clover hay at \$8 a ton than to pay for pasture at 7s. a week for a cow.

By way of proverb, English farmers say: Send produce to market on four legs, instead of four wheels.



## A FEW WORDS ON THE VALUE OF TREES.

WRITTEN FOR THE GENESEE FARMER BY C. N. BEMENT.

THE associations with the beauty of trees about our country homes enter deeply into the elements of our character; and a hope of what we are about to write may induce some of our readers to plant trees for the purpose of increasing the beauty and the appearance of seclusion and quiet of the homes of their wives and children.

The numerous trees and the still more numerous flowering shrubs which belong to our forests, all capable of being made to flourish in every part of the State, give the planter who is studious of the effects of landscape, inexhaustible resources. Some of the trees grow habitually to the height of only thirty or forty feet; others rise to seventy or a hundred. Grouped in planting, they are capable of giving to a level plain the appearance of any desired inequality of surface. To tall pines, elms and locust at a distance will seem to occupy a hill, the hickories and maples to clothe its sides, while the spreading beeches, broad oaks, and hanging birches, will form the grandest descent to the plain. Among these a winding path leading under or near the largest trees and behind thickets, may give to a few acres all the advantages of variety of a large forest.

It is surprising how small is the number of trees necessary to produce a striking effect. Ten or twelve trees fortunately or skillfully disposed on the sides or brow of a hill, are often sufficient to give an air of richness, harmonizing perfectly with a highly cultivated country. The happy effect of three or four trees on an island gives it a desirable air of seclusion and rest; as if it must be the residence of contentment. One almost covets a house so pleasantly situated. While an unprotected, solitary house seems to shiver in the north wind, and we involuntarily wish for the inhabitants a more cheerful home. Why should not at least one tree be found growing near the dwelling of every man, even the poorest and the humblest?

It appears that the soil and climate of our country are perfectly well adapted to all kinds of wood which are found in temperate countries. It is only necessary to understand the character and habits of each, and to choose suitable soil and situation.

Of many of our trees the properties we but partially know. Some of them grow only in particular districts. Others are so unlike those found in the mother country that they hardly have a name.

Nature points out in various ways that a rotation of crops is as important in the forests as it is in cultivated fields. A pine forest is often, without the agency of man, succeeded by an oak forest, where there were a few previously scattered through the

woods to furnish seed. An oak forest is succeeded by one of pine, under the same condition. But it frequently happens that there are not enough trees of the opposite family to seed the ground: in which case a forest will be succeeded by another of the same kind, which, though it will grow, will probably not flourish with the same luxuriance as would one of another family.

The first want is fuel. The trees best suited to the purpose are the hickories, the oaks, the beech, the birches, the maples and the pines, particularly the yellow or pitch pine, and the chestnut and hemlock for close furnaces and boilers. If fuel is to be used in the form of charcoal, the hard woods only are of great value, particularly chestnut, the hickories, the birches, maples, oaks and alders. As materials for house-building, the pines, the spruce, and the hemlock are generally employed. White oak was formerly used for frames; and in many buildings now standing, for more than a century, it has not begun to decay, and is more and more in use. Floors are sometimes made of beech, of birch, and of ash. The best materials probably are white and yellow pine, chestnut and spruce. For ship building the various kinds of oak,—yellow and white,—pine, chestnut and yellow locust and red cedar.

To many persons, the pleasantest season in our climate is autumn, and to the lover of nature the rich and infinitely varied gorgeousness of the autumnal woods is a most important addition to the enjoyment of that season in the country. Each tree has its own color, or rather its own class of colors—tints and shade which belong to it, and it alone. Trees to be planted near a residence should be selected in reference to this circumstance, as well as to the time and variety of their formation. Early autumn becomes gay with the vivid crimson of the tupelo and the sumack. A little later come out the rich orange and yellow of the sugar maple, with the gold and scarlet of the red flowering maple. The soft olive tints of the ash, the warm browns of the hickory, the purple of the cornus florida, the buffs and yellow of the birches, gives place at last to the full scarlets yellow and browns of the oaks, many whose leaves remain adhering through the snows of winter. These and forty other trees, and twice as many shrubs, furnish an inexhaustible store-house of colors as they do of foliage. It would be endless to speak of the adjuncts of trees, the climbing shrubs, the Virginia creeper, as remarkable for the richness of its fading colors, the ivy, the bittersweet, with its orange-colored flowers, and the climbers which naturally attach themselves to our trees, and which may be trained upon them in cultivation. All these are studies for the landscape gardener, and add immeasurably to the pleasure of the contemplative man who



dwells in or traverses the country in autumn with the eye of the painter and the feelings of a poet, or with those of a worshiper of the author of these beauties.

Poughkeepsie, July, 1865.

### BURNING OLD SODS.

As this is the season for doing this work, we would again call the attention of the readers of the *Gene-see Farmer* to the advantages of burning old sods, and converting them into ashes for use in the field and garden. We are satisfied that were ashes more frequently used we should have better vegetables and healthier fruit trees. There are few things so efficacious in checking the spread of fungus—and nearly all the diseases of our agricultural and horticultural crops are caused directly or indirectly by some species of fungus.

We would urge our readers who have the opportunity to burn a few heaps of sods this season by way of experiment.

"The sods are not burnt, strictly speaking, they are simply charred. The "ashes" that are left are mixed with the charred remains of the grass, roots, and other organic matter in the soil. These ashes constitute one of the best fertilizers that a gardener can use. They are free from insects and fungus, and, when mixed with the soil, make it very mellow and porous.

It is not easy to give directions how best to conduct the burning process. A little experience is needed. The dry sods are placed round a little straw and wood, and the fire started. More sods are added as the fire burns. The fire must not be allowed to burn through, and it is this point that tests the skill of the operation. *Morton's Cyclopaedia of Agriculture* gives the following directions for conducting the operation :

"It is usual to begin paring early in the spring ; if by manual labor, men follow each other with breast-plows, and will turn up an acre apiece in about four days ; if with a plow, the field is completed in a little time, and all becomes dry simultaneously. In two or three weeks, the turf, sufficiently dried, is put into small heaps for burning, the sods being loosely packed in the center, but closely set together on the outside. The art in burning is to keep a smouldering fire, never smothering it with too much earth, and keeping the outside layer of sods so close as to prevent the fire from kindling into flame. Experience, no less than theory, tells us that the mass should be only scorched and blackened, and by no means burned into red cinders. But actual trial will teach the farmer to do this much better than mere written directions. The ashes should be spread, time allowed for their cooling, and then

plowed in with a very shallow furrow to keep them near to the surface. The cost of paring and burning, of course, varies exceedingly, according to circumstances. In paring old sward, from 12s. to 18s. is the cost, and for burning the same, 10s. an acre may be considered a proper sum ; the parings being first harrowed over to disturb the furrows, and shake some of the earth off. The spreading of these ashes will cost from 2s. to 4s. an acre, but the most of them are carted off the land, piled up in a heap, and thatched over till the month of May, when, with other manure, they are used as a compost for the turnip crop. In paring light arable lands by hand, as wheat or barley stubble, the cost will of course be less than this, as 7s. or 8s. an acre ; and the harrowing after it would be more severe, resulting indeed in the entire separation of the plants from the earth, the former being in general raked together and burned by day labor. But paring, especially in this case, is properly work for horses—not for men. One of the best modern paring-plows will pare the land as true as with the breast-plow, taking twice the width of a common plow, yet drawn by only two horses.

"In breaking up the sandy and chalky downs of Wilts, Hants and Dorset, the following mode has been found to answer better than any yet devised : Pare the sward as thin as possible with the breast-plow ; burn in small heaps at equal distances on the land, care being taken that the turf is not too dry ; the ashes being much richer when it smoulders away than if burned quickly. \* \* \* On loamy soils, paring and burning has proved a most successful method of breaking up grass-land—destroying the roots and seeds of weeds, reducing to ashes the turf would cover the land in the shape of loose sods, and render it too 'hollow' for a wheat crop ; producing valuable manure, in the form of burned soil and charred vegetable matter, and killing the insects that would devour the first produce.

Clay-burning is a process of long standing and renowned, of undeniable and extraordinary benefit, precisely the improvement required upon many thousands of acres, yet hitherto applied in very limited areas."

MR. DUREN, of Woburn, Mass., writes the *New England Farmer*, that he cures his hens of sitting by shutting them in a tub with an inch or two of water on the bottom, during the day. Puts them on the roost at night, and if not cured treats them to the water remedy for another day, and they will be glad to stand on their feet.

TAKE care of the plows. While they are idle during harvest, see that they are well cleaned and covered with a coating of lard and resin.



## FOREST TREE CULTURE—NO. 2.

EDS. GENESEE FARMER:—When it is desirable to make or form a new forest it will depend for size on the quantity of land the owner may occupy. We should not be deterred from embarking in an enterprise so laudable and useful though but an half acre could be applied to the purpose.

Where land is scarce and of a high price, select such a locality as may be best fit for tillage—gullies, broken and uneven ground, or such as is stony. Let the ground be well plowed and pulverized by harrowing. Glens in October or as soon as acorns, nuts or other seeds of trees drop, sow them either broadcast or by drilling—one seed to each square of two feet or closer, and then harrow with a light implement.

Should but little or no snow fall in the locality during winter a mulching of leaves, straw or any any other matter that will cover the soil, will be required. As the kernel in sprouting strikes its roots into the ground the coteledon strikes up during winter, and unless protected by mulching may be killed in the winter. See how nature protects them during the hard freezings by mulching with the foliage of the trees. And it would be well perhaps indispensable, to keep the ground mulched several seasons, particularly if the finely-rooted grasses appear, unless the seeds have been planted in rows, then it could be plowed, which must be shallow so as not to disturb the spongioles. Positively admit no animals. Should the grasses not intrude the growth of weeds, briars, &c., will be no hurt, but a help. As the young trees progress they will crowd each other—this is necessary to make them straight and lofty. They will prune the lower branches themselves, and as they branch, the weaker ones will decline—and no more than can conveniently grow will remain. But the lopping off of the lower limbs and removing of those that decline the prudent husbandman will attend to with his own hands. It is almost incredible what number of trees will grow to great size, particularly in height on an acre. The poplar, white pine, tamarack, and many other kinds will not require more than fifteen feet square. This would admit of one hundred and eighty-three to one acre!

As respects the varieties for the formation of the forest, much depends on the object the planter has in view. If utility be the object—the various oaks, hard maple, hickory, ash, poplar, lin, black and white walnut, and the chestnut with others among deciduous trees are worthy of cultivation. Among the evergreens the white pine stands foremost, the red cedar, hemlock, and others should be admitted.

Where utility and taste are combined, all the trees of the forest indigenous to the section in which the

plantation is to be made should have a place. Yet respect should be had to the nature and position of the variety. The chestnut with some others flourish best on high sandy ridges—the swamp, burr oaks, black ash on low ground—the white pine on high, sandy and dry hills, yet some grow luxuriantly in swamps. The black locust, red cedar and mulberry for their qualities in durability deserve to be cultivated. The wild cherry too is valuable. But each person or association must determine the kinds they desire to rear.

The chestnut, black and white walnuts and hickory, are full worth cultivating for their good nuts. But mingled with other trees in a forest they bear not near so abundantly as when isolated. But their timber is valuable—the more so when grown in a forest, because more lofty and clean of limbs.

Sodus, Mich., July, 1865.

## FOOT ROT IN SHEEP—AGAIN.

EDS. GENESEE FARMER:—With all that has been published in regard to foot rot in sheep it yet prevails, for when once introduced it requires time and the closest attention to dispose of it. The virus or inoculation is left from the diseased foot on the grass, and is removed only by severe frost, or heavy dews. On the first appearance of the disease there is a watery mucus gathering between the hoofs, and in a few days it works in between the hoof and the frog of the foot, and if not attended to in a few weeks the hoof becomes loose, and falls off. The farmer that has but a small flock should provide himself with a sharp knife and blue vitrol. Dissolve the vitrol in water as strong as it can be made. Put the sheep on a dry floor. Examine every foot. Those that are diseased pare off all of the hoof that is loose from the frog of the foot. This requires close attention, then dip the foot in the prepared vitrol. So dip every foot diseased twice a week for six weeks, put them into a field that has not been occupied by diseased sheep, and a cure will be effected. If the flock is more than fifty, prepare a trough twelve or fourteen feet long, ten inches wide, flat on the bottom, fill it two inches deep with the prepared vitrol, yard the sheep in a dry yard, at the opposite end make a passage way that only one can pass out at a time. In this way place the trough after they have all passed through drive them a few rods. Every one the least affected will go lame. Take all such and examine every foot where the disease is found, treat as above, go on so twice a week for six weeks, and if kept where no disease has been, a cure will be effected. One great difficulty in effecting a cure is letting them run on grounds where the disease has been left for weeks before.

Wheatland, N. Y., July, 1865.

R. HARMON.



## SCoured FLEECES FROM MERINO AND COTSWOLD SHEEP.

REPORT OF COMMITTEE OF THE NEW YORK STATE SHEEP AND WOOL GROWERS' ASSOCIATION ON SCoured FLEECES.

HON. HENRY S. RANDALL, *President New York Wool Growers' and Sheep Breeders' Association:*

"THE Committee entrusted with the duty of awarding the premium offered by Hon. D. D. T. Moore 'for the fleece of one year's growth, or thereabouts, which on being cleansed, shall be found to give the greatest weight of wool, in proportion to its time of growth and to the live weight of the animal,' submit to your Association the following Report:

"On the 11th day of May last, at Canandaigua, fifteen sheep were shorn in competition for Mr. Moore's premium—five of them rams, ten ewes. All of these sheep, except one Cotswold, were Merinos. The liberal offer of \$50 for the heaviest fleece of wool, to be tested by having it cleansed as wool is cleansed by manufacturers, excited much interest among breeders of sheep and the public generally. The fifteen sheep that competed were, it is to be presumed, supposed by their several owners to be as good as could be produced; and it is quite probable that in the main they were correct in this opinion, though in some instances the result of the cleansing shows to the contrary.

"The true value of a fleece of wool must depend on its quantity and quality. Mr. Moore has asked for a test of only one of these points—quantity. It is perhaps well that he confined himself to this single point, for by so doing a breeder of Cotswolds, Mr. Gazley, was induced to compete. The well-known fact that the sheep that produce the coarser wools give fleeces that shrink much less in cleansing than the finer wools, has led many persons to believe that, of clean wool, the so called mutton breeds produce nearly or quite as much, in proportion to their weight, as the fine woolled sheep. The opinion was freely expressed on the Fair Grounds that the Cotswolds would win the prize. It is to be regretted that the mutton breeds had not been more fully represented, that the comparison could have been more complete than it now is. We will venture to express the hope that in future trials more of this kind of sheep will compete, and if necessary to induce this competition, that premiums be offered for the fleeces not only of fine woolled sheep, but for the fleeces of the breeds raised principally for mutton. This might involve, perhaps, three classes, viz., fine woolled sheep, long woolled and middle woolled sheep.

"We feel confident that Mr. Moore's plan of having the true weight of the fleeces determined by positive tests must lead to important results in instructing both wool grower and wool manufacturer, and lead both branches of the common interest engaged in producing the clothing of our people to a better understanding of the facts involved. The wool grower desires to get the most he can for the produce of his flock—the manufacturer as naturally desires to get as much wool for a given sum of money as he can. However disposed the parties may be to deal fairly by each other, they will fail to come to an understanding, mutually satisfactory, unless they are both in possession of a knowledge of the facts in the case. It may be true that much labor and cost is involved in cleansing fleeces and making the necessary figures to determine the relative merits of a great many of them, but knowledge in regard to so important a matter is worth the price.

"It is due to your Association and the competitors that the processes adopted by us in the discharge of our duties should be set forth. Mr. Goffe, one member of the committee, is the manager of the Syracuse Woolen Mills, and under his immediate direction the fleeces were cleansed. His statement of the manner is by him given as follows:—'The wool was washed by taking 16 pounds of soda ash and 32 pounds of salt, dissolved in 150 gallons of water in a large tub. I then took a small tub and dipped out a sufficient quantity to wash one fleece, then put in the fleece and scoured it in the small tub—then took out the wool and discharged the liquor, and washed each fleece in this manner, so that none of the wool was lost, wasted or mixed with the other. In dry-

ing the wool we laid it on a cloth on the wire screen over our dryer, (which is inside the mill,) so that none of it was lost in drying. The strings were kept with each fleece and put with them when weighed after scouring.'

"These precautions appear to make it certain that there could be no error or unfairness in the process, and the result was that the wool was scoured, as Mr. Goffe says, 'as we would for manufacturing—that is, we take out all the animal oil, or "nature" as we term it, which is necessary in order for the wool to take color in dyeing.'

"The wool thus cleansed was carefully weighed, and then the weights, together with the weights of the un-cleansed fleeces, the time the wool was growing, the live weights of the shorn animal, and the other facts necessary, were placed in the hands of Mr. Homer D. L. Sweet, a member of the committee, and by him the table that accompanies this report was made. This table shows by inspection the whole matter—placing the competitors in the order of their merit. The work of making this table was considerable, and Mr. Sweet's associates on the committee feel under great obligations to him for having taken it on himself. His manner of making the computations he describes as follows:—'Divide the weight of the scoured fleece by the number of days it was growing. This gives the amount produced by the animal in a day. Divide this small fraction by the live weight. This gives the amount grown by one pound of animal in one day: multiply this fraction by 365 and it gives the amount grown by one pound of animal in a year, (this is the figure that decides who has won,) and this, multiplied by the live weight of the animal, tells how much it would produce in a year. This last operation proves the three foregoing calculations. The per-centages of fleece to live weight, and of scoured wool to live weight, are computed in the usual way.'

"By this process Mr. Sweet has made a table that gives at a glance all the facts necessary to decide who has won the premium, and the exact standing, in all particulars, of each competitor in the contest. By simply reading the first line it appears that Addison H. Clapp, (who stands at the head of the list,) had a ewe that was two years old, in fair condition—weighing forty-nine pounds—that sheared a fleece that weighed (as it came from the animal,) nine and eighty-five hundredths of a pound—that it cleansed four and seventy-five hundredths of a pound of wool—that the un-cleansed fleece weighed twenty per cent. of weight of animal—that the scoured wool was nine and six-tenths per cent. to weight of animal. The scoured wool to shorn fleece, is forty-eight per cent.—making the loss in cleansing fifty-two per cent. The age of the fleece was 367 days; the quantity of wool produced in a day by the animal was .01294 of a pound; the quantity of wool produced by one pound of animal in one day is .000264; the quantity produced by one pound of animal in a year is .09636, and the quantity produced by the animal in a year would be 4.72 pounds. This is the standing, as appears by the table, of the prize animal.

"To contrast this animal with one of the same age, sex, breed and condition, we will take Mr. J. C. Sweet's ewe, No. 12 in the order of merit. Mr. Sweet's ewe was two years old, in fair condition, weighed 78.5 pounds—fleece 17.5,—the scoured wool 5.31,—per-centage of fleece to live weight, 22.2—per-centage of scoured wool to live weight, 6—per-centage of scoured wool to fleece, 30.3—per-centage of shrinkage, 69.7. This comparison followed through will give the whole case.

"It may be well to institute some comparison between two rams. We will take Mr. F. Gibbs' No. 5, and L. J. Bovee's No. 13. Mr. Gibbs' ram was one year and one day old, in good condition; he weighed 50.5 lbs. His fleece weighed 11.31 pounds—it scoured 3.97—the per-centage of fleece to live weight was 22.3—the per-centage of scoured wool to live weight is 7.6—the per-centage of scoured wool to fleece is 35.1—the per-centage of shrinkage 64.9. Mr. Bovee's ram was a year and fifteen days old, in good condition, weighed 108.5 pounds, sheared 18.09—scoured wool, 5.18—per-centage of fleece to live weight, 16,—per-centage of scoured wool to live weight, 4.7—per-centage of scoured wool to fleece, 28.6—per-centage of shrinkage, 71.4.



NAME OF OWNER.	Order of Merit.	Sex of the Animal.	Age in years and days.	Condition of the Animal.	Weight of Animal.	Weight of fleece shorn.	Weight of scoured wool.	Per cent. of fleece to live weight.	Per cent. of scoured wool to live weight.	Per cent. of scoured wool to fleece.	Per cent. of shrinkage.	Age of fleece in days.	Quantity produced in each day.	Quantity produced by one lb. of animal in one day.	PRIZE COLUMN. Quantity of wool produced by 1 lb. of animal in a y'r.	Quantity produced by each animal in one year.
A. H. Clapp,.....	1	ewe	2	fair.	49.	9.85	4.75	20.	9.6	48.	52.	367	.01294	.000264	.09636	4.72
L. J. Bovee,.....	2	ewe	.356	fair.	53.	11.21	4.50	21.1	8.4	40.1	59.9	356	.01264	.000238	.08687	4.60
Wm. M. Holmes,...	3	ewe	1.43	good.	47.	8.97	4.43	19.	9.4	49.3	50.7	408	.01085	.000230	.08395	3.94
D. W. Percy,.....	4	ewe	2.	"	63.50	14.43	5.12	22.7	8.	35.4	64.6	373	.01372	.000216	.07884	5.
M. F. Gibbs,.....	5	ram	1.1	"	50.50	11.31	3.97	22.3	7.6	35.1	64.9	366	.01084	.000214	.07311	3.94
Josiah Taft,.....	6	ewe	.331	thin.	33.	7.03	2.28	21.3	6.9	32.4	67.6	331	.00688	.000208	.07592	2.50
O. S. Williams,...	7	ram	2.	thin.	61.	10.81	4.47	17.	7.3	41.3	58.7	368	.01214	.000199	.07263	4.43
E. Gazley,.....	8	ewe	1.20	fat.	99.50	8.90	7.31	8.	7.	82.	18.	385	.01898	.000189	.07098	7.06
Arnold & Green,...	9	ewe	2.	good.	55.50	9.15	3.59	16.	6.2	39.2	60.8	336	.01068	.000192	.07000	3.88
P. H. McMillen,...	10	ewe	1.4	fair.	68.50	12.42	4.81	18.	7.	38.	62.	369	.01303	.000190	.06935	4.75
Theron Steele,...	11	ram	1.60	good.	77.50	15.72	6.25	20.	8.	39.1	60.9	425	.01470	.000188	.06862	5.31
G. S. Center,.....	12	ewe	1.347	fair.	54.50	10.25	3.33	18.	6.1	32.4	67.6	341	.00976	.000179	.06533	3.56
J. C. Sweet,.....	12	ewe	2.	"	78.50	17.50	5.31	22.2	6.	30.3	69.7	376	.01412	.000179	.06533	5.12
A. J. Blood,.....	12	ram	4.	good.	95.	20.09	6.56	21.	6.9	32.6	67.4	385	.01703	.000179	.06533	6.20
L. J. Bovee,.....	13	ram	1.15	good.	108.50	18.09	5.18	16.	4.7	28.6	71.4	380	.01363	.000125	.04562	4.94

"In this connection we will take the Cotswolds. Mr. Gazley's ewe No. 8, one year and twenty days old, fat, weighed 99.5 pounds—fleece as shorn, 8.9 pounds,—scoured wool, 7.31 pounds—per-centage of fleece, *only* 8, while percentage of scoured wool to live weight of animal is 7.—per-centage of scoured wool to fleece, 82.—per-centage of shrinkage, 18, which is only about one-third as much as that of the prize animal. Mr Bovee's ram, though a Merino, produces more weight of animal in a year than Mr Gazley's Cotswold ewe, but much less scoured wool,—and this ram weighs more than twice as much as the prize ewe, sheared twice as much fleece, and in the prize column stands less than half as high.

"Masses of figures present few attractions to most people,—but we suggest to producers of wool and mutton a careful study of the table we give, being confident that useful information will be derived therefrom. We will content ourselves with one more comment.

"It will be at once seen that the small sheep have greatly the advantage in the contest—not that the very smallest sheep prove the winner, but the rule, in the main is proven to be true,—that small sheep, having more surface in proportion to their weight, do give more wool per pound of body. This is entirely in accordance with the elaborate tables made by Mr. Sweet of the weights of animals and fleeces as shown in his own flock. His tables have been extensively published, and the lessons they taught is confirmed by our investigations."

"For the mere purpose of wool raising very large sheep are not desirable."

Respectfully submitted by  
GEO. GEDDES,  
HOMER D. L. SWEET,  
A. J. GOFFE,  
JAMES L. ELLIS,  
CHARLES TALLMAN.

July 8th, 1365.

It will be seen that the fleeces from the fourteen Merino sheep weighed 176½ lbs.,—and after cleansing only 64½ lbs. In other words, 100 lbs. of fleece contained 64 lbs. of worthless matter, and only 36 lbs. of real wool.

On the other hand, taking the only coarse woolled sheep shown,—that of Mr. Gazley's Cotswold ewe—it will be seen that 100 lbs. of such fleece contains 82 lbs. of real wool. In other words, 100 lbs. of Cotswold fleece, contains as much wool as 227 lbs. of Merino fleece.

The figures in the last column but one determined the award. It will be seen that the highest pro-

duce of scoured wool in proportion to live weight, calculated for a year, was a little over 9½ lbs. to a hundred lbs. weight of animal, and the lowest was 4½ lbs. The *average* of the fourteen Merino sheep shorn was nearly 7½ lbs. of scoured wool to 100 lbs. weight of animal, in a year.

In the last column we have the amount of cleansed wool produced by each sheep in a year. The highest was Mr. Gazley's Cotswold ewe, which produced a little over 7 lbs. of wool. The Merino sheep which obtained the prize produced a little less than 4½ lbs.

The chief interest of this trial centers in the comparison of the Merino and Cotswold sheep. Comparatively few are interested in knowing which particular breeder happens to have a Merino sheep that affords a trifle more wool than another Merino of the same breed. The fact has no special importance. But we would all like to obtain reliable information in regard to the production of wool in proportion to live weight, of the different breeds of sheep, and it is a matter of regret that only one sheep of any breed except Merinos was shown, and this a yearling Cotswold ewe.

This Cotswold ewe produced 7 lbs. of cleansed wool in a year, for 100 lbs. live weight, while the average of the Merinos was 7½ lbs.—the highest being 9½ lbs., and the lowest 4½ lbs. It seems to be taken for granted that the sheep eat food in proportion to live weight—and to a certain extent this is probably true, where the sheep have the same general characteristics, but whether true of "mutton sheep," as compared with Merinos may be considered an open question. But admitting that this is the case—that a Cotswold sheep will eat as much as a Merino in proportion to live weight, it is a very important point to determine what is the real "live weight." In Mr. Lawes' well-known experiments with the different breeds of sheep—and which showed that the different breeds of mutton sheep consumed



food in proportion to live weight—the live weight was determined by taking the *mean* of the weight of the sheep at the commencement, and at the end of the experiment. But in the trial at Canandaigua the “weight of animal” represents merely the weight at the time the fleece was sheared, and does not represent the mean weight of the sheep during the period of the growth of the wool. It is true that it would have been difficult if not impossible to have ascertained the mean weight of the sheep during the year, but it is manifestly unfair to merely take the weight of the sheep at the time of shearing. For instance the Prize sheep was a Merino ewe two years old, which weighed 49 lbs., and the calculation which determined the award is based on this figure. In other words it is assumed she weighed 69 lbs. during the year the wool was growing. On the other hand the Cotswold ewe was 1 year and 20 days old and weighed 99½ lbs., and the calculation is based on this figure. In other words it is assumed, in this case as is in the other, that the sheep weighed 99½ lbs. during the whole time. This is manifestly unfair. Let us assume that a year ago she weighed 5½ lbs., and that she gradually increased till she weighed 99½ lbs. at the time of shearing. Her mean weight during the year would be 52 lbs.

On the other hand if the Prize Merino ewe weighed 49 lbs. when *two years old*, it is highly probable that she at least weighed 25 lbs. a year ago. Her mean weight, then, for the year while the wool was growing would be 37 lbs. Now as she produced 4.75 lbs. of scoured wool, it will be found that 100 lbs. weight of animal would produce less than 12½ lbs. of wool, while a similar calculation will show that a Cotswold produced, for 100 lbs. of average weight of animal, 14 lbs. of scoured wool. So that in point of fact the Cotswold produced more wool in proportion to the real weight of animal than the Prize Merino sheep.

**SETTING FENCE POSTS.**—Where it is necessary to set wooden posts, it will be found that their durability will be greatly promoted by slightly charring or carbonizing the surface before inserting them in the soil. There are few substances more indestructible than charcoal when buried beneath the surface and kept constantly in contact with moist soil, or soil that is constantly wet. We have seen posts thus protected, taken from the soil after having stood upwards of thirty years, in perfectly sound condition, so far as rot was concerned, below the surface, while the upper part, which had been exposed to the atmosphere, was in a state of complete decay. The cost of charring is but a trifle, and may be effected by means of chips, brush or refuse matter of any kind. A very slight charring will be sufficient to insure the preservation of most kinds of wood whether hard or soft. Stakes are also equally benefitted by this process.—*B. C. W. in Germantown Telegraph.*

## SURFACE MANURING.

MUCH has been written in praise of surface manuring within the last few years. On every new topic men are apt to allow their minds to run to extremes. We have no doubt that surface manuring may be practiced with benefit within certain limits. On low, wet lands, where the soil is very thin, we should advise this mode of practice. We have seen the heaviest crops of grass from this method, of any we ever witnessed. The freshets that overflow our intervals will often leave a sediment from which the largest crops of hay are realized. On the other hand, we believe that a large per cent. of the manure is lost by top dressing on dry land, and especially with loam manure. We saw a curious illustration of this a few years since. A neighbor kept a horse and cow, and not being in a situation to make use of the manure in cultivation, he ordered it hauled out and spread in an old orchard. The consequence was that the ground became completely bound out. Instead of a large crop of grass as was anticipated, it actually diminished. Since then he has plowed in his manure, and has received heavy crops.

We recollect of top dressing a piece of sandy loam with muck directly from the swamps. The consequence was that a few stalks of herdsgrass grew very tall, but there was no thickening up of the grasses on the surface of the ground. It may be regarded as a fixed rule, that plants of rapid growth, like those of our cultivated crops, require the manure to be incorporated with the soil to insure their quick development. Trees grow rapidly where there is a covering of vegetable mould upon the surface of the earth. A covering of partially decayed leaves prevents the evaporation of moisture from going on so rapidly, while their slow but uniform decay furnishes food for the trees. Hence the advantages of mulching trees.

We know of no better condition in which to secure a good crop, than by thoroughly incorporating an abundance of manure with the soil. Merely plowing in manure is not always the best economy. We have seen horse manure plowed under a green sward early in the fall where it became a dry and inert substance of no sort of value to a future crop.

Ashes and plaster may often be found beneficial as a top dressing, but in these cases we should prefer to use them with the grain crop and harrow them in. We think that when meadows are well drained, and of easy access, top dressing will be practiced more than heretofore in this State.—*Maine Farmer.*

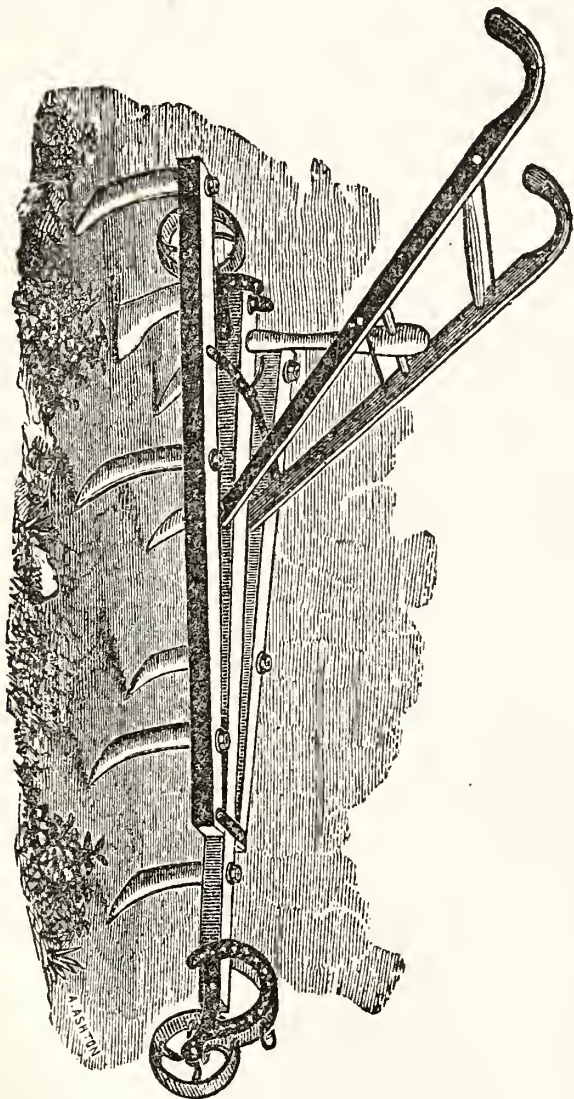
**SAVE the seeds.** Look well to this subject. Select the best of every variety as they ripen—cure properly, label, and store away for future use.



## AGRICULTURAL IMPLEMENTS AND MACHINES—NO. 2.

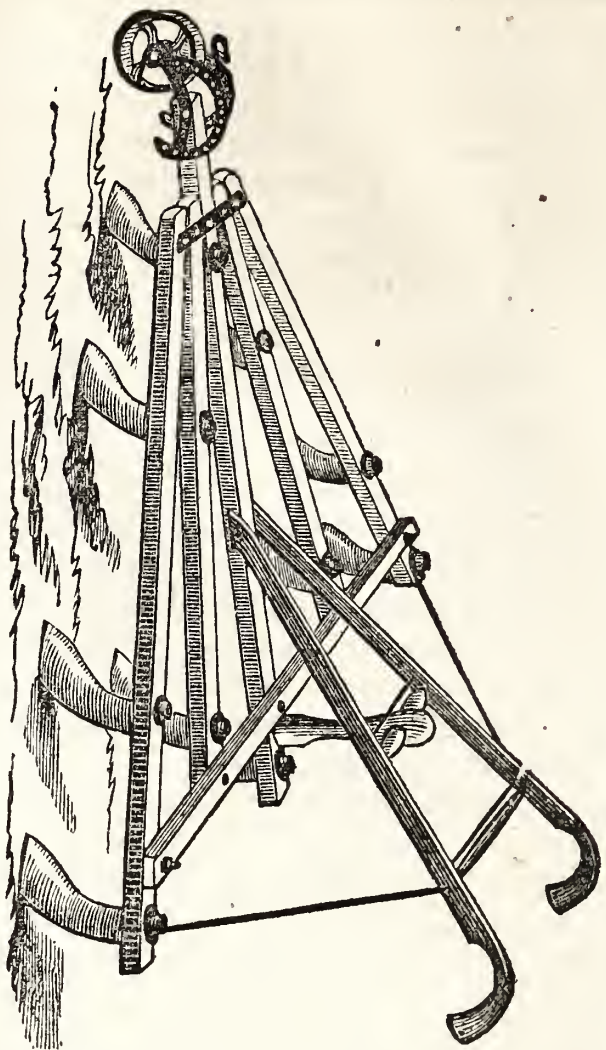
WE present the readers of the *Genesee Farmer* this month engravings of two of the most useful implements we are acquainted with. They are manufactured by the Remington Agricultural Works, at Ilion, Herkimer county, N. Y. One is the Johnston Cultivator, for working among corn, beans, potatoes, &c. It is named after our esteemed correspondent, John Johnston, of Geneva, N. Y., he having suggested several improvements in the form of the teeth, &c., which were made from time to time after being tried on his farm, till the desired shape was obtained. For working in heavy soils there is no cultivator equal to it, and we know of none better for general use on all soils. The teeth are made of steel, and, as the engraving shows, are quite narrow, which enables them to penetrate and mellow the soil to a considerable depth.

Steel mould boards, for hilling, can be attached to the cultivator by removing three of the teeth. In this form it works most admirably.



THE JOHNSTON CULTIVATOR.

The Remington Two-Horse Cultivator we have used to a considerable extent, and can commend it as a valuable implement for preparing land for wheat and other crops. The teeth are narrower and strike the ground less abruptly than the ordinary two-



THE REMINGTON TWO-HORSE CULTIVATOR.

horse cultivators in use in this section. It is not so hard on the horses, and does better work.

It would be well if more of our agricultural implement manufacturers would take the course adopted by the Remingtons in getting up their implements and machines. This Johnston cultivator is the result of repeated trials on the farm of Mr. Johnston, and it is almost impossible to construct a perfect implement without such trials. The intelligent, practical farmer can often suggest improvements which would add greatly to their efficiency.

In this connection we may be allowed to repeat an anecdote in regard to Mr. Remington. Last spring when on a visit to John Johnston, after considerable talk with him, and when about to ask another question, we expressed the fear that we should tire him. "Not at all," he said. "I never was tired of talking agriculture but once. Old Mr. Remington—and a fine man he was, too—came up here and we talked all day about agricultural implements, and by night *I was a little hoarse*; and that is the only time I ever got tired." Let agricultural manufacturers adopt this course, and a marked improvement will soon manifest itself in our implements and machines.

GLYCERINE is the best article for curing cracks in cow's teats. Apply it twice a day after milking.





## GARDEN WORK FOR AUGUST.

THE weather this season, in the vicinity of Rochester, has been quite favorable for the garden. Rather cool, perhaps, for melons, sweet potatoes, and other semi-tropical plants, but very comfortable for the laborer, and the earth has not been parched, vegetation has not been withered by such a drouth as prevailed a year ago.

It has not been such a season to kill weeds as the last, but then if weeds have flourished, so have useful plants. It only required more labor, and the larger crops resulting from an abundance of moisture, will repay all extra labor.

The crops of *small fruits* were fine, but the prospects for *large fruits* is decidedly unfavorable. Peaches and apples must have been killed when in bloom, I think, by frosts or some other cause. Pears look well about here, but I hear of short crops elsewhere. Grapes are beginning to mildew in many vineyards. Science must arouse herself, or this once fruitful region, will be destitute of that most wholesome luxury.

*Asparagus*.—Pass over the bed occasionally, and cut out those stalks that are going to seed.

*Beans*.—Pole beans should be pinched off when about six feet high. Limas should be picked, shelled, and eaten when green.

*Cabbage and Cauliflower*.—Hoe often, but draw no earth to the plants.

*Celery*.—Hoe often, drawing a little dirt around the plants.

*Corn*.—Leave the largest, earliest ears for seed.

*Cucumbers*.—Should be picked over often for pickles, allow none to ripen on the vines, as it renders them less fruitful.

*Melons*.—Pick off all but five or six to a vine, and you will get much finer fruit.

*Onions*.—When ripe should be pulled and dried, before laying away for winter. The latter part of the month sow seed for an early crop next year.

*Potatoes*.—Early ones are ripe, and should be dug as soon as the vines are dead, and if to be kept for winter, put in a cool place.

*Tomatoes*.—Gather as they ripen—use freely, can, bottle, or jug them, and they will come good next

winter. Watch for the tomato worm, which can be detected by his droppings under the vine.

*Turnips*.—The different varieties of the flat turnip, can be sown through the most of the month.

*Spinach*.—Sow the latter part of the month for early spring use. Make the ground rich.

## STRAWBERRIES.

If not too dry, August is a good month to make plantations of strawberries. They will get well rooted before winter, and bear a pretty fair crop next year. The old tried sorts, such as the Early Scarlet, Wilson, Triomphe d' Gand, Hooker, &c., are not superceeded yet by any of the new candidates for popular favor.

*Raspberries and Blackberries*.—Should be thinned to four or six canes, and the dead ones removed.

*Grapes*.—Should be watched, unnecessary branches removed, bunches thinned, &c., &c. P. C. R.

## EARLY TOMATOES WITHOUT A HOT-BED.

EDS. GENESEE FARMER:—In the July number of the *Genesee Farmer*, I see an inquiry made by Mrs. John Miller, of Galt, C. W., asking "how to raise tomatoes very early without making hot-beds." Now I would like to give her my wife's mode of culture, and perhaps it may be of use to some others. The 1st of March she takes a box filled with light soil (which she has obtained in the fall) sows the seed, keeping the box in a room which is always warm from a stove in the adjoining room, and the plants have the morning sun. When the plants are about three inches high she transplants them into boxes made of thin boards wider at the bottom than the top (say six inches square, and five inches square, and seven inches high, without the under boards being fast, as by that means the plants can be moved from the boxes to the place in the garden better) keeping them in those until the spring frosts are over, then the ground being prepared, the holes dug, the boxes are slipped into the holes, tapping the side of the box so as to let the plant fall down, and the box be raised up over the plant, close the soil round the tomato, and the work is done. The plants will not know that they have been moved. They can be kept in the house if needed until fruit is set. My wife will have ripe tomatoes by the 1st of August—or may be the very last of July. She has the best success of any one in this vicinity. There is a small white worm that troubles the plants when they are getting the second leaves, but, if some snuff or tobacco is shaken on will stop their work, for the tomato plants raised in the house are the best, for they are stronger than hot-bed plants.

H. R. D.

Belmont, Allegany county, N. Y., July 10, 1865.



## THE FARMER'S "DOOR YARD."

"WHAT a nice front yard you have," said a young farmer to a friend of ours a few days since. "You have the most beautiful flowers I have ever seen."

Part of this may have been mere compliment, as the "door yard" in question will not compare with an ordinary suburban lawn and garden. But as it happened to be a *farmer's* door yard, and is not utterly neglected, it called forth the remark we have quoted.

The young man is the eldest son of one of the most successful farmers in the neighborhood. Coming to the "Genesee Country" when it was to the resident of the Eastern States as far "West" as Kansas is now, he cleared a farm, raised a large family and gave them an excellent education. He has plenty of apples, cherries and peaches, and we are not sure that he has not what is quite rare in a farmer's garden, a good patch of the best varieties of strawberries and raspberries. The house is delightfully situated, with some noble deciduous trees and fine evergreens surrounding it. The young ladies are fond of flowers, and succeed pretty well with their annuals. There is a bell on the front door, a piano in the parlor, with half a dozen or so oil paintings on the walls, the work of one of the daughters. Ten different periodicals are taken and a pleasanter country home is seldom found.

Now why should not such a farm have a well kept lawn, with a few choice shrubs, evergreens, ornamental trees, &c. Has he not land enough? Can he not afford it? What would it cost? Would not a hundred dollars a year be a liberal estimate, even charging full price for every half hour occupied in keeping it in order. We think fifty dollars a year would convert some of the unsightly door yards, so frequently seen in the country, into a delightful lawn. And there is positively no reason why this is not done, except that the farmer has never been in the habit of attending to such things and has no taste for them. If a man is really poor, there is some excuse for neglecting those things which do not afford an immediate profit. But we have in all parts of the country hundreds of thousands of farmers who can afford to have a nice lawn and garden if they only desired it. Here is a farmer who has spent over \$10,000 in erecting a house. His "door yard" is—well, no better than his neighbors. Perhaps he would be talked about if it was. A big house is allowable in the country, but the agricultural Mrs. Grundy would be horrified should a farmer pay much attention to ornamental grounds. But what is the good of the big house with its neglected "door yard?" Does the good wife feel any happier in it? Are the children more comfortable? Does it afford any pleasure to the passer-by?

Would it not have been better to have spent less on the house and more on the grounds and garden? Suppose, instead of spending \$10,000 on the house and nothing on the grounds, he had spent \$7,000 on the house and reserved the \$3,000 for making and keeping up a nice lawn, planting out a few hedges, making good walks and setting out ornamental trees. Had he spent \$1,000 on his grounds the interest on the remaining two thousand would have kept them in good order. Would not such a course have been better? Admitting that it does not pay, we would ask how much the extra \$2,000 invested in the house pays. It not only brings in nothing, but requires more money to furnish the rooms, &c. And in case you want to sell it, who would not prefer to have had the money invested in setting out trees, &c., than in the house?

Not many months since a rich gentleman in one of the Eastern Cities, wanted to buy a farm for his son. He preferred Western New York. He was willing to pay any sum from \$20,000 to \$60,000, if he could get such a farm and buildings as he wanted. But he wanted everything ready to his hands—a pleasant house, good buildings, and well laid out grounds, roads, &c. We were asked where there was such a farm in this section that could be purchased; and we were obliged to confess that we did not know of any in this neighborhood that would fill the conditions. We have many farms in a good state of cultivation, many good houses, but where do you find well laid out grounds? We are confident that there are farms where a thousand dollars spent ten years ago in judicious planting, with a hundred dollars a year in keeping up the grounds, would have added, in this case at least, from five to ten thousand dollars to the value of the farm. But this is not the main reason for attending to these matters. We want farmers to make pleasant homes for their children. This young man who admired a "door yard" kept a little better than is generally found on farms, is already anxious to leave his father and go to the city. He thinks farming nothing but hard work, and sighs for some pleasanter occupation. We think he had better stay on the farm. A man who gets an honest living in the city has to work just as hard as farmers, but he does not realize this, and it must be confessed that we find, even among those in moderate circumstances, pleasanter homes in the suburbs of our cities, than in the country. This need not be. A farmer can make his home pleasant to himself and attractive to his children. Agriculture needs intelligent young men, and especially intelligent farmers' sons. We must make farming more agreeable. But this is a subject we cannot discuss at this time. What we now wish to urge upon our readers is the importance of paying more attention to their grounds round the house.



## THE CURRANT WORM.

DURING the discussions at the late meeting of the Fruit-Growers' Society at Rochester, we were surprised to hear three different members, men of great intelligence, state that the perfect insect of the currant worm is a small yellow or orange colored fly. As this opinion seems to be a common one, it may perhaps be regarded as a sufficient correction, to refer to Dr. Fitch's Third Report to the New York State Agricultural Society, page 109, where the perfect insect is described as a moth [or "miller;"] "of a pale nankin yellow color, the wings with one or more faint dusky spots behind their middle in the male, and in the female with an irregular band crossing both pairs." The wings measure from tip to tip about an inch and a third. These insects have been repeatedly obtained from the worm, removing all doubt as to their appearance and character; and they may be seen in abundance hovering along currant rows in summer, where the larvæ have been permitted undisputed sway.

We have never known the sprinkling of white hellebore on the leaves to prove a failure. As a general rule, *repellants* of insects are of little or no value, but those remedies only are efficient which *kill*. The powdered white hellebore effects this result immediately, as soon as the worms take the first dose, no matter how thinly it has been sprinkled over the leaves from the finely perforated dredging-box. P. Barry stated at the Fruit-Growers' meeting above mentioned, that he found it better to make a solution of the hellebore in water, and throw it on the leaves with a syringe. There may be other poisons that will answer the same purpose, but none appear to have been tested—although we have heard that a solution of copperas, the water being 30 or 40 times in weight that of the copperas, had been found effectual, but farther trial is needed to prove it of value.—*Country Gentleman*.

We have not now time to reply to the above as fully as the importance of the subject merits. It is common to speak of the worms that devour the leaves of the goose-berry and currant in this and some other sections of the country as "caterpillars," and as "flies" do not produce caterpillars, our friend of the *Country Gentleman* thinks we are in error in speaking of the insect as a "fly." This would be a conclusive argument provided it was established that the currant-worm is a caterpillar.

There are caterpillars that devour the leaves of the gooseberry and currant bushes. We have observed them on our own bushes the present season. They can be readily distinguished by shaking a bush, when they let themselves down by spinning thread. But these caterpillars are not numerous. They are not the "currant-worm" which has proved so destructive in this section since 1858. We think there can be but little doubt that this insect is the "gooseberry saw-fly" (*hematus trimaculatus*.) It is a worse enemy than the gooseberry and currant moth (*abraxas grossulariata*.) But the worms are not "caterpillars." It is well known that the larvæ or young of most kinds of the "saw-flies" closely resemble caterpillars; so much so that they are frequently denominated "false caterpillars." Such

are the worms on our currant bushes. They are not genuine caterpillars, though it is convenient to speak of them as such. But as it is evident we have two kinds of worms which devour the leaves of the gooseberry and currant it would be well to bear the distinction in mind.

We are glad the *Country Gentleman* has called attention to this subject. It is always important to call things by their right names, and it is evident that in this instance we are talking about different insects. We do not suppose that the "moth" described by Dr. Fitch is the parent of the currant worms which are so numerous on our bushes. But it would be well to have the matter definitely settled. As we have before said there is a "moth" in some sections that produces caterpillars on our currant bushes. These caterpillars closely resemble the "false caterpillars" or the gooseberry saw-fly. But it is the latter which produces what is popularly known as the "currant worm." In other words, "the perfect insect" of the currant worm is a "fly" and not a "moth."

## ROTTING OF THE CHERRY.

IN some districts of the country, the wet weather has nearly or entirely destroyed the cherry crop the present season, and earnest inquiries for a remedy are the consequence. The only remedies known, appear to be prevention. In order to get rid of the moisture as speedily as possible after rains, the trees should be planted where the air circulates freely, on hills or exposed places, and as much as possible away from other trees. Cherry orchards should therefore never be crowded. Besides these precautions, select those soils which rot the least, or make it a point to have enough of them to furnish a supply in very wet seasons, when others are destroyed. Probably no variety is less affected than the Early Richmond (the genuine sort,) the rich acid flavor appearing to be proof against it. All high flavored acid varieties withstand rot better than the sweeter and more delicate sorts. The Morellos are valuable in this respect and the Dukes are commonly less affected than the Hearts and Bigarreaus. Of the latter, the old Black Carone is one of the best,—a sort thrown out of most collections years ago, but worthy of a place on this account, and a good high flavored fruit when perfectly ripe. Some of Dr. Kirtland's new sorts have a rich acid flavor, (such as the Tecumseh and Red Jacket,) and we have found these to withstand rot better than the more esteemed and delicate varieties. The common Black Tartarian is a very delicate and nearly sweet fruit, and hence particularly liable to this disease.—*Country Gentleman*.

THE best strawberry in England is said to be Rivers' Eliza.



### "JUNE THE TIME TO PRUNE FRUIT TREES."

EDS. GENESEE FARMER:—In looking over my numbers of the *Farmer* to-day, I noticed an article in the May number of 1864, with the above heading. This put me in mind of a remark made by one of my neighbors, a clever Dutch farmer, who was passing by when I was cutting off some shoots in my orchard. "What are you doing?" said he. I answered, "Cutting off some shoots and sprouts which grew on the trunk and near the ground." He remarked, "This is no time to prune or trim trees." Said I, "It is my time." "Well," said he, "you will see you will ruin your trees." Said I, "If this be so, it will be my loss." But I had my misgivings at the time, as I was not quite certain I was right; but as I only came in possession of my farm this spring, and having much to draw my attention, I did not trim my orchard when other people thought I should; and not wishing to tramp down the grass, which was growing for hay, I deferred the matter till after the grass was cut and the hay made, which was the last week in June. This by reading the very able article written by E. D. Wright, I find to be the right time; and this much I have gained by being the only subscriber to the *Genesee Farmer* in our place.

D. W. SAMPREL.

Northumberland, Pa., July, 1856.

### LARGE PANSIES.

A WRITER in one of our horticultural periodicals, we do not remember which, gives his experience in growing large pansies, as follows:

"Last year we had a bed of very fine pansies, the seed of which was obtained of the most reliable florists. We gathered the first and earliest seed from this bed, and planted as soon as ripe. They came up and became strong and healthy plants before winter. We transplanted them into a nicely prepared bed just before winter set in, then covered them with litter from the cow-yard; and finally spread over the whole a quantity of evergreen boughs. As soon as winter was fairly over, we took off the evergreens and raked off the litter, and we found them as fresh and green as when first set out. I do not think one of them died. We never had a bed of pansies keep better through the winter. We have between two and three thousand plants, many of them in bloom. They far exceed our expectations, being much superior every way to those of the previous year. We have thought they would not be pretty if they were any larger. One of them measures more than two inches in diameter, many of them two inches, and nearly all one inch and three-fourths. Cultivation has done much for this flower."

We have done a little in this way ourselves, within the last couple of years, and have had most excellent success. We did not transplant ours, but allowed them to remain where the seed was sown, only covering them in the winter with manure. To obtain large pansies the foregoing mode must be followed.—*Germantown Telegraph*.

### CULTIVATION OF STRAWBERRIES.

MR. DAY, of Morristown, N. J., a successful strawberry grower, furnishes the *New York Observer* with his method of cultivation: First—

*Soil*.—The soil is a clay loam, clay rather predominating, sufficiently stiff to *bake*, when not well manured and cultivated. Second—

*Time of Planting*.—My bed was planted in the spring, but I usually plant more in August and September than any other season. My custom is to plant at either season when I get ready. If planted in August or September a fair crop may be expected the following season. Third—

*Distance Apart*.—I invariably plant in *rows* and *never* in *beds*. I hold that the objections to planting in *beds* are so great and so palpable, that it will admit of no discussion whatever. My standard rule is to plant in rows three feet apart, and plants two feet in the row. I have found this close enough for every convenience of picking, cultivation, manuring, &c. Fourth—

*Runners*.—"What do you do with the runners?" is almost a universal inquiry. We treat them as *weeds*, unless wanted for the increase of stock. Cut them off as fast as they appear, by any convenient process your own judgment may dictate; a light, sharp steel spade, or a scuffling-hoe, I have found the most practicable and expeditious. Fifth—

*Manures*.—I use no other but barn-yard manure, *composted* nearly one year, with an occasional top-dressing of dry wood ashes. The soil is lined before the bed is planted at all. The object of composting is to destroy the seeds of grass and weeds, the bane of strawberry culture. The value of composted manures, in my estimation, is simply beyond computation. Let any one try it once.

In first preparing the ground I aim to use an *abundance* of manure. My theory is that plants that are expected to produce *fruit* must have something to *feed* upon. Sixth—

*Mulching*.—I mulch in the fall with clean straw, and leave it on through the spring for the fruit to lie upon while ripening, to avoid the necessity of washing the fruit, only opening the mulch immediately about the crown of the plant. Seventh—

*Duration*.—I prefer to have some new plantings coming in every season; but, by good management, I think a bed may be continued in one place about three years. Eighth—

*Product*.—The total product of our bed, this season, was a fraction short of *five bushels* on the 37.50 part of an acre, making at the rate of 185 bushels to the acre. Ninth—

*Flavor*.—The "Albany Seedling" combines more good qualities in itself than any other one variety we know of. It has been pronounced by some as



too acid. We have not found it so when properly ripened. Even that acid is pleasant and very healthy. Tenth—

*General Management.*—In conclusion, we would urge *clean* cultivation, principally by hoeing, and only plow or spade but once a year—viz., just *after* the crop of fruit is gathered.

### THE CUT-WORM IN GARDENS, AND A WAY TO MANAGE IT.

THIS pest of all pests in the garden, (especially if one happens to have a garden that is full of its specimens,) is a regular scourage among young and tender plants. For several years I have had to take up my pansies and keep them in boxes of sifted soil, in order to save them from being all destroyed. And for four years in succession they have cut down about all of my Truffaut's peony-flowered Asters. They would also work at almost all young plants, and no help for it, but to go out mornings, and where there was a prostrate plant dig out the worms and kill them. I have spent more money for Truffaut's Asters than for any other one kind of seed. I have obtained package after package of imported seed, and then had them nearly every one cut down. Putting all together, I have labored weeks on account of this worm alone, beside suffering the disappointment caused by the loss of the plants. As if in close affinity with the great arch parasite and destroyer, this thing would work only among those plants most prized. Indeed, I hardly ever knew one to cut off a weed, and but very seldom a coarse plant. This spring they were quite numerous in our garden by the green house. It is in this spot that they delight, the soil being light and easy to work. The last winter was particularly favorable to them, the ground being covered with snow all winter. The snow came before there was much frost in the ground, and kept them warm in their winter quarters. I well remember the dismay with which I observed their numbers this spring. The following was my method of treatment: I commenced digging the soil early, and had all my plants taken up. I then put in each bed a good portion of soot cleaned from the stove pipes and furnaces, and raked it in well with the soil, allowing it to remain and soak in several good rains before I set out my plants. It is now June 26th, and I have not lost a plant where I put the soot, although the worm has worked as usual in certain portions of ground where no soot was placed. A little extra toil and pains will pay, if we can thereby escape the vexatious experience of having our plans frustrated for the whole season. All that are annoyed with the cut worm, can appreciate such deliverance from it, if they will make use of plenty of soot. It may be well to rake

it in thoroughly, and let the rains neutralize it before setting out the plants. If it is not too strong it is an excellent fertilizer in light soils.—MRS. E. G. HAWLEY, *Oneida Community, in the Circular.*

### SULPHUR FOR KILLING WORMS ON TREES.

EDS. GENESEE FARMER:—About the year 1834 the worms were probably more troublesome on our fruit trees than now. My own orchard was so striped of verdure as to look as if it had been burned over.

In the month of *February* following I bored into the trees with a half inch bit about two inches, and packed the hole full with *powdered sulphur*, plugging up the hole, using as short a plug as possible.

When the sap started, the sulphur being diffused throughout the branches and entering fully into the circulation did its work *effectually*. The worms hatched; but as soon as they commenced feeding they dropped off dead. The whole orchard the following year was fresh, and more than usually luxuriant. I think the only reason this remedy has ever failed—is, because the sulphur was not applied at the *proper season* so as to be taken up by the circulation of the sap.

M. B.

Rochester, N. Y.

SALTING DOWN CUCUMBERS FOR PICKLES.—Leave half-inch of stem on cucumbers—wash them in cold water—immediately pack with salt in alternate layers, salt next to wood—one barrel salt to five of cucumbers. Fill barrel full, putting salt on top—cut a wide board so as to just fit *inside* of barrel—bore half a dozen half-inch holes through—place it on pickles with a stone on, which should weigh at least twenty-five pounds, so as to keep the pickles always in brine. Take off all scum which rises. Keep the barrels in the shade, and in four weeks take off stone and fill to top, as they will settle some. Put more salt on, then head up, and they are ready for market. It is best to have two sizes of pickles.—W. W. C., *Fairport, N. Y., in Country Gentleman.*

THE chief value of the Catawissa raspberry consists in its hardiness. Throughout the New England States as well as in this section all the better varieties of raspberries require protection in winter, but the Catawissa does not. Whether the other varieties are not enough better in quality to compensate for the little labor required to bend down the canes and throw a spadeful of soil on the ends is a question of taste. As a general rule those things that require the least labor are the least valuable.

WHENEVER you see a caterpillar's cocoon in your orchard, get it off the tree and trample upon it.



## Ladies' Department.

### OCCUPATION OF WOMEN IN ENGLAND.

"BUT it must be granted, that, if the employments to which American women are compelled to resort are often severe, and less remunerative than they ought to be, they are by no means so unsuited to the sex as some which women are forced into in other countries. Only a few years ago many thousands of females were working under-ground in the English coal-mines. When laws were enacted to abolish this unsuitable employment, they still continued to work at the mouth of the mine, and are thus employed at this moment. They labor in the coke-works and coal-pits; they receive the ores at the pit's mouth, and dress and sort them.

"So far exceeding masculine strength and endurance are the tasks imposed on thousands of English dairy-women, that they constitute a special class of patients with the medical faculty,—pining and perishing under maladies arising entirely from over-fatigue and insufficient rest.

"There are multitudes of women in Liverpool who work daily on the farms around that city. They walk four or five miles to the scene of their toil, where they are required to be by six in the summer months and seven in the winter. They work all day at the severest agricultural labor, wielding a heavy, clumsy hoe, digging potatoes, grubbing up stones from the soil, stooping on the ground in weeding, and compelled even to the unfeminine and offensive employment of spreading manure. For a day's work at what men alone should be required to do, they receive but a shilling! Then, worn out with fatigue, having eaten little more than the crust they brought with them,—for what more can be afforded by one who earns only a shilling a day?—they drag themselves back at nightfall over the increasingly weary miles which they traversed in the morning. What comforts can fall to the lot of such? What a domestic life must such unhappy creatures lead!

"There are yet others, in that land which boasts of its high civilization, who live by carrying to the city immense loads of sand for sixpence a day,—harder work than carrying a hod. Other women may be daily seen collecting fresh manure along the streets and docks of Liverpool.

"In certain rooms of the great English cotton-mills, the high temperature maintained there often compels the women to work in a half-naked condition. This constant exposure of one half the body speedily destroys all feminine modesty. Added to this is an extreme, but unavoidable, filthiness of person. These poor creatures part with their health almost as quickly as with their modesty. They become hollow-cheeked and pale, while their coarse laugh and gestures indicate a deep demoralization."—*Needle and Garden in Atlantic Monthly.*

**BUTTERMILK POP.**—Rub an ounce of butter into a tea-cup of flour, wet it up to a thin paste with cold buttermilk, and pour it into two quarts of boiling fresh buttermilk. Salt to the taste.

**ICE CREAM.**—One quart of milk, one and a half tablespoonfuls of arrowroot, the grated peel of two lemons, and one quart of thick cream. Add the juice of the two lemons. Twice this quantity is enough for thirty-five persons. Find the quantity of sugar that suits you by measure, and then you can use this every time, without tasting. Some add whites of eggs, others think it just as good without. It must be made *very* sweet, as it loses much by freezing.

**PHILADELPHIA ICE CREAM.**—Two quarts of milk (cream when you have it), three tablespoonfuls of arrowroot, the whites of eight eggs well beaten, one pound of powdered sugar. Boil the milk, thicken it with the arrowroot, add the sugar, and pour the whole upon the eggs. If you wish it flavored with vanilla, split half a bean, and boil it in the milk.

**STRAWBERRY ICE CREAM.**—Rub a pint of ripe strawberries through a sieve, add a pint of cream, and four ounces of powdered sugar, and freeze it.

**SOUP.**—Get a good beef soup bone, boil two hours, leaving about two quarts of broth; break two eggs into some flour, and knead it very stiff; roll out in three sheets to the thickness of wrapping paper; spread them on a table to dry for half an hour; then place them on one another and roll them up as you would jelly cake; with a sharp knife, cut very fine strips from the end, not wider than the thickness of a case knife; shake them up to separate them; drop into your broth slowly, stirring your soup all the while. Boil ten minutes; season with pepper, salt, celery, or a little parsley.

**FRENCH PANCAKES.**—Take six eggs, separate the yolks from the whites; beat the whites on a dinner plate to a snow; beat four yolks with two tablespoonfuls of sugar, two of flour, and a tea-cupful of cream; add a little salt, and a very little carbonate of soda; put in the whites of the eggs, and mix gently. Put one ounce of butter in a frying pan; when hot, pour in the whole pancake. Hold the pan a good distance from the fire for fifteen minutes; hold before the fire to brown on the top. Dish on a napkin. Put any kind of preserved fruit over it. Serve hot.

**APPLE SNOW.**—Put twelve very tart apples in cold water over a slow fire. When soft, take away the skins and cores, and mix a pint of sifted white sugar; beat the whites of twelve eggs to a stiff froth, and then add them to the apples and sugar. Put it in a dessert dish, and ornament with myrtle and box.

**FLUMMERY.**—Cut sponge cake into thin slices, and line a deep dish. Make it moist with white wine; make a rich custard, using only the yolks of the eggs. When cool, turn it into the dish, and cut the whites to a stiff froth, and put on the top.

**SUBSTITUTE FOR BUTTER.**—The *Baltimore Clipper* says:—A lady who is a famous housekeeper, recommends an economical plan for making cake without butter, which may be useful to our lady readers. Take a piece of fat salt pork, melt it down and strain it through a piece of coarse, thin muslin. Set it aside until cold. It is then white and firm, and may be used like butter in any kind of cake. In pound cake, she assures us it is delicious. She says after one trial she never used butter.





A COUPLE of discontented cows came down the hill pasture to a little patch of corn, and looked over. It was grandmother Muggins' corn, and it was fenced round. The cows had all the pasture on the hill, east, west, north and south, besides a little brook; but it did not satisfy them, for you know that some it is impossible to satisfy; the more they have, the more they want; which was the case with these cows, else why should they look into grandmother Muggins' little patch? They pushed their noses between the rails, and snuffed the growing corn. What if they should use their crumpled horns, hook off a rail, and walk in? This is what grandmother Muggins' thought; therefore, "Little Jerry," said she, "I am going to carry a basket of clean clothes to the hospital; you and 'Wagtail' watch the cows, and do n't let them break into the corn."

"Wagtail," hearing his name called, began to wag his tail. "I will keep the cows out," answered little Jerry with a consequential air; "it takes *me* to look after the corn;" and Jerry strutted away with "Wagtail" at his heels. "Wagtail," said he, "you might as well

go with the clean clothes; I can look after the cows and the corn."

"Can you?" wagged "Wagtail" humbly.

Little Jerry was tired with his long tramp from the red school-house. "Wagtail" had been in the forest hunting a woodchuck, and he was tired. So they both sat down on the flat rock. The south wind sung a lullaby. The cows from beyond the fence eyed the little boy, and the little boy eyed the cows. Jerry shook his fist, and the cows shook their heads. At length Jerry nodded, and he nodded and he nodded till he fell asleep; and the cows taking the advantage, began to pry the rails with their crumpled horns. "Wagtail" had his ears pricked. He sat up as alert as a soldier. He sleep! not he; and no sooner did the cows show their designs upon the corn, than he ran down and barked, and he barked and he barked till grandmother Muggins came home and found—little Jerry fast asleep.

"Trust him who makes no boasts," said grandmother Muggins, patting the faithful "Wagtail" on the head.



## Miscellaneous.

### "SELLING" A FELLOW.

LAST summer, while engaged in the tobacco and segar business, I used to have for a customer in cheap segars one of those knowing fellows whose knowledge serves better to bore his victims than advancing science. You couldn't make him believe that—oh no! Tell him there were regalia segars that cost \$10 per thousand!—it might do to stuff down the throats of those who knew no better; he was none of them. And so it was with everything; he always knew best. It always appeared to be his delight to draw me into some controversy, no matter what the subject, in order to hear himself hold forth. I tried every way I could think of to circumvent him, but at last I did succeed in laying him out as flat as a flounder.

It was on a Saturday afternoon, he came in, made his purchase, and seated himself to deal me out his usual portion! but I was awake for him.

"Captain," said I, "I have made up my mind to go to California, and, if you wish to go into a speculation, now is your time."

"As how?" said he.

"Why, you see them fifteen boxes of segars? well, there are two hundred and fifty in each box, and I will let you have the whole fifteen at a low rate, providing you take them all."

"Very well," said my friend, "let's hear the conditions."

"You give me one cent for the first box, two for the second, four cents for the third, and so on double up on every box."

"Done!" said he; "fetch on your segars. S'pose you think I haven't money enough—eh?"

"Not at all, so let's proceed; here's the first box."

He drew from his pocket a leathern purse, and out of it a handful of coin.

"And here's the cent," said he, depositing a green discoloured copper on the counter.

"Here's your second box."

"And here's your two cents."

"Very well, here's your third box."

"And here's your four cents," said he, chuckling.

"Here's your fourth box."

"Exactly, and here's your eight cents! Ha! ha! ha! old fellow—go on!"

"Here's your fifth box," said I, handing down another.

"And here's your sixteen cents."

"Here's your sixth box,"

"And—ha! ha! ha!—here's your thirty-two cents."

"Here's your seventh box."

And here—ha! by Jove the joke is getting too rich—here's your sixty-four cents, and nearly half of your segars are gone."

"Here's your eighth box," said I, assuming a cool indifference that perfectly astonished the fellow."

"And here's your dollar and twenty-eight cents."

"Here's your ninth box."

"And here's your—let me see—ah! two dollars and fifty-six cents."

"Here's your tenth box."

Here he drew his wallet thoughtfully, and on the slate made a small calculation.

"And here's your five dollars and twelve cents."

"Here's your eleventh box."

"And here's your—twice five is ten, twice twelve is twenty-four—ten dollars and twenty-four cents."

At this stage of the game he had got quite docile, and I continued—

"Here's your twelfth box, hand over twenty dollars and forty-eight cents."

Here the globules of perspiration, large as marrow-fat peas, stood out in bold relief on his face, but at length he doled out the sum.

"Here's your thirteenth box—fork over your forty dollars and ninety-six cents."

At this crisis he looked perfectly wild. The sweat was pouring off him in streams, and the tobacco juice was running out of his mouth.

"F-o-r-t-y-n-i-n-e-t-y-s-i-x. If I do I do, but if I do I will be hanged, I will."

QUIDDITIES.—Domestic magazines—wives who are always *blowing-up* their husbands.

The smaller the calibre of the mind, the greater the bore of a perpetually open mouth.

Punch says the gender of a railway train is feminine. Don't you often miss it?

The first thing a man takes to in life is his milk—the last is his *bier*.

A man was gored to death, in Liverpool, recently by an—Irish bull.

The height of Inhospitality.—Not to entertain your own opinion.

Wanted for chemical purposes.—A lady "dissolved in tears."

AN EASTERN ANECDOTE.—One of Nasserredin's neighbors called upon him, and solicited the loan of a rope. The Koodjah went into his house, and after a delay of several minutes, returned and told the borrower that the rope was in use to bind up flour.

"What do you mean?" said the neighbor, "how can a rope be used to bind up flour?"

"A rope may be applied to any use," replied the Koodjah, "when I do not wish to lend it."

NAPOLEON, once in the gallery of the Louvre, turned from a fine picture to Baron Denon, saying: "That is a fine picture, Denon." "Yes, immortal," was the reply. "How long will this picture and a statue last," said Napoleon. "The picture five hundred years, and a statue five thousand, sire." "And this you call *immortality*!" said Napoleon, shortly.

AN Irish peasant being asked why he permitted his pig to take up his quarters with his family, made an answer abounding with satirical *naivete*. "Why not? Doesn't the place afford every convenience that a pig can require?"





### The Markets.

IN general agricultural produce, there are few transactions. The market has not yet opened. The views of farmers and buyers are far apart. The latter only purchase when they can "make a sure thing of it." Our advice is, not to be in too big a hurry to sell. We cannot believe that there was as large a breadth of grain sown as in ordinary years. There were not men enough to do it. Then the crops, taking the country through, are not above an average yield, while all accounts from the South represent a fearful destitution, and it seems clear that a large amount of produce must be sent South. There is no money in the Southern States, and this will check the demand for Northern goods, but *food* must be had. Before the war the South raised more food in proportion to population than the North. Then the Eastern States are almost entirely depended on the West for breadstuffs; while the Middle States do not, even before the war, raise enough to supply their own consumption. The West then has to furnish food for New England and to make up the deficiency in the Middle States. This was the case before the war. Now in addition to this there will be a demand from the South, and this must be met from the West—and if, as we assume, there was a less breadth sown than usual, it seems clear that there will be no such "surplus" as many of our produce dealers would lead us to suppose.

Wait till the market fairly opens. There is no reason to apprehend lower prices *unless there should be a decline in gold*—and we think that this is *already calculated for* by the dealers. Were they sure that gold would continue at 140, prices would immediately advance. In fact prices of breadstuffs in the Eastern markets have advanced within the past few days, though it is said to be merely speculative, and has stopped exportation to England. American red wheat in England now brings about \$1.20 in gold. This with gold at 140 is equal to \$1.68. What the price will be in England the coming season is yet uncertain. It is now, and has been for the past three years much below an average. There as here they are waiting to see what demand there will be in the Southern States for produce.

We understand that some of the millers are talking of "a dollar a bushel for Mediterranean wheat." This is simply absurd. *Wheat cannot be raised at this price*, and it is safe to assume that whenever grain gets below its actual cost of production, an advance will soon take place. We think farmers in this section should obtain \$1.50 to \$1.60 for good Mediterranean and Amber wheat. We should not care to sell for less. It may be lower, but the chances are that it will be higher.

Wool has pretty much passed out of the hands of

the farmers. A large dealer tells us that he never bought wool so easily. Farmers were determined to sell for what they could get. We hear of one large farmer who was offered \$1 a pound last year and three cents extra for drawing it to Brockport, but refused it, who has sold both clips the present season for fifty-two cents. We think farmers were unnecessarily in haste to sell this season. Prices have lately advanced fully five cents a pound. Everything that the farmer has to buy is still high, and there is no reason why good prices should not be obtained for what he has to sell. As a general rule, it is better to sell when you are ready, provided a fair price is offered, but not to be in too big a hurry when the dealers are determined to make up for previous losses, as is the case at present.

### New Advertisements.

AMONG the new advertisements in the *Farmer* this month will be found several announcements of interest to our readers.

Seymour's Patent Tree Protector, strikes us favorably. The manufacturers sent us one for trial, but we have not yet had time to use it.

Whitcomb's Spring-Tooth Rake is a most excellent machine for raking hay, wheat stubble, &c.

Hutchinson's Wine and Cider Mill is just the thing for farmers' own use. They are extensively used in this section, and give good satisfaction.

Whittmore's Cure for Foot Rot in Sheep is well spoken of by those who have tried it. Send to the manufacturer, F. W. Whittmore, Chatham Four Corners, N. Y., for one of his circulars containing directions.

The Philadelphia Raspberry, Wilson's Early Blackberry, &c., are offered for sale by the Hon. W. Parry, of Cinnaminson, N. J. His name is a sufficient guarantee to all who know him.

"Magic Picture Cards" will interest the young people. They are very ingenious.

A. M. Purdy, of South Bend, Indiana, who is an extensive strawberry grower, can furnish good plants at cheap rates.

The Champion Force Pump advertised by John Rapalje, of this city, is a most useful and efficient machine. We have used the Hydropult for many years, and would not willingly part with it. Had it not been for this small hand machine our house, a short time since, would have burnt up. This Champion Force Pump we regard as superior to the hydropult, it is far simpler and equally powerful, while a lady can use it. For syringing bushes, trees, &c., as well as for washing windows, carriages, &c., it is exceedingly useful, while in case of fire it will frequently save a hundred times its cost. We cannot too highly recommend it to our readers.

THE Ohio *Farmer* of July 29, says the farmers are beginning to sell their wool in that State. Large quantities changed hands last week at about sixty cents. One lot sold for sixty-five cents, but as a general rule buyers refused to pay more than sixty cents, and a shade under.



### The Scientific School of Yale College.

JOSEPH HARRIS, Esq.—*Dear Sir:*—In compliance with your request I communicate some details of our plan of Agricultural Instruction, which it is proposed to begin in the Sheffield Scientific School of Yale College the coming autumn. Our Institution is, I believe, the first to go into operation under the provisions of the Congressional grant of land to the States for establishing schools of industrial science. The agricultural department being one branch of a school intended for general scientific and industrial education, its facilities in respect to completeness and thoroughness of instruction in the studies necessary to and underlying a proper agricultural training, are not surpassed by any existing school or college. The student of agriculture will enjoy the instructions of fourteen Professors of acknowledged ability, besides those of several assistant teachers in the following subjects, viz: English, French and German languages, including Rhetoric and Elocution, Natural Philosophy, Chemistry, Botany, Zoology, Mineralogy, Geology, Meteorology, Anatomy and Physiology, Physical and Political Geography, Land Surveying, Higher Geometry, Geometrical and Free-hand Drawing.

The full course of study occupies three years. During the first year the pupil pursues preparatory studies. With the second year, he takes up in connection with general science, topics bearing directly on Agriculture, viz: Vegetable Physiology and Agricultural Chemistry, presented in a course of Lectures extending through twenty-eight weeks. In these lectures, during the first term, the whole subject of the composition, structure, growth and nutrition of the plant—its dependence on the air and soil—the composition and character of the soil, the means of its culture and renovation by tillage, drainage and manures—the kinds, uses and management of manures, will be discussed in the light of the most advanced knowledge as derived from both Science and Practice. In the second or third term the same general topic will be continued, but with special reference to the domestic animal and its products. The laws of animal nutrition, the value and uses of different kinds of fodder, the preparation of food by steaming, &c., the proper mixture of fodder for special purposes of fattening, &c., and the chemical technology of the dairy, will be explained as far as the present state of our knowledge admits.

In order to familiarize the student with the properties and uses of those bodies which compose, nourish or result from agricultural plants and animals, a course of experimental Practice in the chemical Laboratory, will be followed during the second year, which will serve, besides the important purpose of developing and disciplining the learner's powers of inquiry and observation. During the third or summer term of the second year, will be taught the Principles and most approved methods of horticulture and kitchen gardening.

In the third year will be given a course of Lectures by Prof. Brewer on Agricultural Practice. He will give during the first term an account of each principal crop of the Northern and Middle States, its origin, varieties, modes of culture, uses and adaptation to various conditions of soil, climate and market. In the second term, the rearing, care and uses of domestic animals, the characteristics of breeds and races, the economy of pasturing, soiling and stall-feeding, will be considered in detail.

During the last term of the course, Prof. Brewer will review the condition of Agriculture, past and present, in foreign countries, explain the systems of farming practised in England and other lands where great excellence has been attained in husbandry, and unfold the philosophy of Rural Economy in general.

During the third year, Prof. Verrill, having previously taught general Zoology, will give a special course of lectures on the natural history of domestic animals and on insects useful and injurious to agriculture.

Prof. Eaton will also lecture on Forestry—the culture, preservation and uses of forest trees, and on Weeds and noxious Plants.

In the special agricultural instruction, it will be kept in view to present such matter as will interest and

prove useful to the American farmer, rather than to make a display of minute and unpractical knowledge. To profit to the fullest extent the student should possess a considerable practical knowledge of moral affairs, such as comes from several years residence on a farm.

For illustrations of the topics discussed, no pains will be spared to provide experiments, diagrams and museum specimens, and by frequent excursions to neighboring farms and gardens, its instruments, processes and results of culture, good and otherwise, will be demonstrated in the most effective manner.

To enable the student to pursue his inquiries in foreign fields, the French and German languages, both so rich in their agricultural literature, are taught to an extent quite unusual, the tuition in them covering nearly the whole course of three years.

To answer the wants of young men who cannot spare time for a protracted course of study a *shorter course* of seven months is arranged for the autumn and winter terms of each year. (From middle of September to middle of April.) Those who desire can thus attend to all the more important special agricultural topics of the full course in a short space without pursuing languages or other accessory studies.

Admission to the shorter course requires no examination.

Mr. Sheffield, the munificent patron of the school, is now making extensive additions to the building to adapt it to the better accommodation of this and the other departments. A commodious Library and Reading Room will thus be provided, in which the student can have access to the standard agricultural books and journals, under appropriate regulations.

Yours truly,  
S. W. JOHNSON.

We cannot but add to the above interesting letter from Prof. Johnson, that we know of no institution where a farmer's son can get such a thorough knowledge of the principles of scientific agriculture as at the Sheffield Scientific School of Yale College. Even the "shorter course," alluded to by Prof. J., would be of incalculable advantage to any young farmer. We would most earnestly advise any of our young readers, who have the opportunity, to attend this course of instruction the coming autumn and winter. Prof. Johnson, himself a farmer's son, is unquestionably one of the ablest agricultural chemists in this or any other country, and it is no ordinary privilege to sit under the instructions of one so thoroughly acquainted with the principles of scientific agriculture, and who has at the same time a sufficient acquaintance with practical farming to know how to treat and apply them.—EDS. GENESEE FARMER.

### Seeding Land to Grass.

WHERE grass seed is sown alone, August is the best time to sow it, or, if not convenient before, it will do in September. We have known excellent crops obtained the next season from land sown the previous September. On low land that can only be plowed at this season, there is a manifest advantage in seeding at this time. In such situations, red-top (*Agrostis vulgaris*) is, of course, the best kind to sow.

It is said that the farmers in Oxford, Maine, have contracted to furnish potatoes this fall for the manufacture of starch at twenty cents per bushel. We do not anticipate such low prices in this section, though an unusual breadth of land was planted, and the potatoes are very luxuriant. It is said that the disease has already made its appearance, and many of the young shoots are dead.



## Agricultural Exhibitions for 1865.

## State Fairs.

Ohio.....	Columbus.....	Sept. 12-15
New York.....	Utica.....	Sept. 12-15
Canada West.....	London.....	Sept. 18-23
Illinois.....	Chicago.....	Sept. 4-9
N. Eng. Ag'l Society.....	Concord, N. H.....	
Pennsylvania.....	Williamsport.....	Sept. 26-29
Canada Lower.....	Montreal.....	Sept. 26-29
Michigan.....	Adrian.....	Sept. 19-22
Iowa.....	Burlington.....	Sept. 26-29
Indiana.....	Fort Wayne.....	Oct. 2-7
California.....	Sacramento.....	Sept. 11-15

## County Fairs.

## NEW YORK.

Chenango.....	Norwich.....	Sept. 18-20
Cattaraugus.....	Little Valley.....	Sept. 26-28
Cayuga.....		Oct. 3-5
Dutchess.....	Washington Hollow.....	Sept. 26-28
Genesee.....	Batavia.....	Sept. 20-21
Monroe.....	Rochester.....	Sept. 26-28
Otsego.....	Cooperstown.....	Oct. 3-5
Queens.....	Flushing.....	Oct. 4-5
Suffolk.....		Sept. 27-28
Ulster.....	Kingston.....	Sept. 20-22

## OHIO.

Ashtabula.....	Jefferson.....	Oct. 3-5
Clarke.....	Springfield.....	Sept. 5-8
Delaware.....	Delaware.....	Sept. 26-28
Franklin.....	Columbus.....	Sept. 6-8
Geauga.....	Burton.....	Sept. 19-21
Hancock.....	Lindlay.....	Oct. 5-7
Lake.....	Painesville.....	Sept. 27-29
Madison.....	London.....	Sept. 7-9
Morgan.....	McConnellsville.....	Oct. 3-5
Morrow.....	Mt. Gilead.....	Oct. 3-6
Portage.....	Ravenna.....	Sept. 20-22
Stark.....	Canton.....	Oct. 3-6
Summit.....	Akron.....	Oct. 4-6
Trumbull.....	Warren.....	Sept. 20-22

## MAINE.

Essex.....	Lawrence.....	Sept. 26
Middlesex.....	Concord.....	Sept. 21
do North.....	Lowell.....	Sept. 28
do South.....	Framingham.....	Sept. 19
Worcester.....	Worcester.....	Sept. 21
do West.....	Barre.....	Sept. 23
do North.....	Fitchburg.....	Sept. 26
do South.....	Sturbridge.....	Oct. 5
do Southeast.....	Milford.....	Sept. 26
Hampshire, Franklin and Hampden.....	Northampton.....	Oct. 5
Hamshire.....	Amherst.....	Sept. 26
Highland.....	Middlefield.....	Sept. 14
Hampden.....	Springfield.....	Oct. 3
do East.....	Palmer.....	Oct. 10
Franklin.....	Greenfield.....	Sept. 28
Berkshire.....	Pittsfield.....	Oct. 3
Hoosac Valley.....	North Adams.....	Sept. 19
Housatonic.....	Great Barrington.....	Sept. 27
Norfolk.....	Dedham.....	Sept. 28
Bristol.....	Taunton.....	Oct. 3
Bristol County Central.....	Myrick's Station.....	Sept. 20-22
Plymouth.....	Bridgewater.....	Sept. 5
Barnstable.....	Barnstable.....	Sept. 3
Mantucket.....	Nantucket.....	Sept. 26
Martha's Vineyard.....	West Tisbury.....	Oct. 1

## MICHIGAN.

Cass.....	Cassapolis.....	Sept. 27-29
Genesee.....	Flint.....	Sept. 27-29
Hillsdale.....	Hillsdale.....	Oct. 4-6
Ingraham.....	Mason.....	Sept. 27-28
Washtenaw.....	Ann Arbor.....	Oct. 4-6

## ILLINOIS.

Kane.....	Geneva.....	Sept. 27-30
Maeoupin.....	Carlinville.....	Sept. 3-6
Macon.....	Decatur.....	Aug. 29-31
Madison.....	Edwardsville.....	Aug. 29, Sept. 1
Putnam.....	Hennepin.....	Sept. 19-21
Winnebago.....	Rockford.....	Sept. 19-22

It is not yet too late to sow turnips. Scatter a little seed on every vacant spot in the garden and on the farm. When the corn is thin a good crop is frequently obtained with little or no labor. We know a farmer who says that one year he sowed turnips among his corn, and the turnips were worth more than the corn. They do not injure the corn crop. The *strap leaf* is the best variety we have tried for late sowing.

## Literary Notices.

THE NORTH BRITISH REVIEW. June. 1865. Re-print. New York: LEONARD SCOTT & Co.

We always welcome these Quarterlies, but never have found a pleasanter number than this. Every family in the country should have the Reprints of Leonard Scott & Co. They are a library in themselves. And now that we are at peace again, the tone of their articles in this country will be so changed that there will be no drawback to the pleasure which their other articles have always given.

Now is just the time to subscribe for the entire set, or any part of it. Each number of the Quarterlies is a valuable work in itself.

SONGS FOR ALL SEASONS. By ALFRED TENNYSON. TICKNOR & FIELDS: Boston.

This is the second of the series of "Companion Poets for the People, and is beautifully printed and tastefully illustrated. It contains most of the many exquisite little poems and songs which are scattered through Tennyson's entire works.

THE MAN WITHOUT A COUNTRY. Boston: TICKNOR & FIELDS.

This is a curious and entertaining account of "Philip Nolan," which was published some time since in the *Atlantic Monthly*. It attracted so much attention in that form, that the publishers have reprinted it in a little pamphlet. It is an account of the punishment which in a former time our Government awarded to a traitor.

## Diehl Select White Wheat.

WE know nothing of this variety of wheat, advertised in the *Farmer* this month farther than what is stated in a letter from the Messrs. Sheldon, of Cleveland, Ohio. They seem to be fair and honorable men, and we have confidence in their statement. It seems that this wheat originated in Indiana. Mr. J. Diehl noticed a single stool of bald wheat growing in a field of Mediterranean, which on examination proved to be a beautiful white wheat,—which ripens as early as the Mediterranean. He sowed it and continued to do so till he could furnish seed to his neighbors, and they state that it is "by far the best and most profitable variety to raise." The straw is stiffer than the Mediterranean, and the yield fully one-third greater.

We have always said that a good variety of white wheat that would ripen as early as the Mediterranean would be worth millions of dollars to the country, and we hope our readers will try this Diehl wheat and report the result.

## The Crops.

In this section wheat will be a fair average. Barley and oats are unusually good. Corn on low land, owing to the wet, cold weather, looks yellow, and will be a poor crop. On rich, dry land it looks promising. The weather has been unfavorable for beans, and there has been less land planted with this crop than for many years past. There is not one acre planted this year where ten were planted last year. The grass crop is unusually good. Apples are almost a failure in this section. The army worm has proved very destructive in many orchards. Peaches are also a failure.

A HEAVY ROLLER.—The granite roller that is used for the preparation of the Hillsborough, N. H., Fair ground, weighs six tons and seven hundred and fifty pounds.



## Inquiries and Answers.

I wish to ask through your excellent paper what are the best roots to feed milch cows. (a) Also what breed of cows will give the largest quantity of milk. (b) I also wish some one experienced in raising tobacco would give an article on its culture through your paper. The routine of labor from planting till it is ready for market. (c)

There is running through my farm a river that becomes very rapid in spring and fall, its course being crooked it washes the banks very bad, often moving its bed three and four rods. The banks of the river are of a rich mucky soil, similar to the Mohawk flats. I wish you and some of the many readers of the *Farmer* would give a remedy to prevent the rise washing the banks. Is there any kind of willow that will prevent it? (d) Also what will kill lice on calves. (e).—YOUNG FARMER, *Leyden, N. Y.*

(a) Carrots are probably the best roots for milch cows, but mangold wurzel are nearly as good and can be raised with less trouble and afford a heavier crop.

(b) In proportion to the food consumed the Ayrshire cow gives the greatest quantity of milk.

(c) You will find several articles on the culture of tobacco in the volumes of the *Genesee Farmer* for the last six years. If you have not these volumes we can send you them for \$5.00. No "Young Farmer" should be without them. You will also find an article on the culture of tobacco at the North in the *Rural Annual* for 1863.

(d) We have had no experience on this subject, and should be pleased to hear from those who have.

(e) Here again the back volumes of the *Genesee Farmer* would prove useful. They give a score or more of remedies. The one which the calves would like best is to feed them with flax seed. One of our correspondents says he gave his calves half a pint of it and it drove off the lice in two days. We presume he boiled it and made it into linseed tea. A tea-spoonful of sulphur given in some milk is another remedy. Rubbing oil on the back and on the head round the eyes is said to be effectual. Washing the calves in tobacco water or applying snuff will kill the lice, but if too much is used it may affect the health of the calves. Mercurial ointment or anageuntum is still more powerful, but must be used with caution. Perhaps your best way would be to send to Messrs. Laler Bros., Utica, N. Y., for a package of their powders, with directions for using it. Let your calves be kept in a dry, warm (but well ventilated) place, cleaned out every few days and supplied with fresh litter, and they will rarely be troubled with lice.

**LEACHED ASHES.**—If you have had any experience in applying leached ashes to summer fallow please inform your readers through your very valuable paper how it should be applied, at what time, and in what quantity—whether it had best be applied as a top-dressing, or be plowed in and mixed with the earth. My land is clay.—AARON OVERHOLT, *Selkirk, C. W.*

We think it would make very little difference how the ashes were applied. The general practice, so far as we have observed, is to sow the ashes after the land has been plowed for the last time, and cultivate and harrow them in. On a summer fallow which is plowed more than once they might be plowed in at the last plowing, or in any way which is most convenient. If you have plenty of ashes we would use from 50 to 100 bushels per acre. The older they are and the more they have been exposed

to the atmosphere the stronger they will probably be. In this section many of our wheat growers do not plow the "summer fallow" but once, say in June; and afterwards use the cultivators, harrows, &c., to pulverize and clean the land. We have seen 100 bushels of leached ashes cultivated in in July or August, with excellent effect. We should be pleased to hear from others on this subject.

**SHEEP DISEASES.**—I wish to ask a few questions of you or your numerous readers concerning distempers and ails in sheep.

1st. Catarrh: whether it will spread if one or two that have it were put among the flock, or whether it is hereditary, and if there is any preventive or cure for it?

2d. The foot-rot, or foot-ail: how it makes its appearance, and if it will spread in a flock, or is hereditary, and if there is any preventive or cure for it?

3d. The grub in the head: how a sheep acts that has it, and if there is any preventive or cure?

If any person knows of any other diseases peculiar to sheep I would be glad to hear from them with some remarks on the subject. A FARMER OF DELAWARE.

## Price of Land in Illinois.

THE editor of the *Prairie Farmer* in a notice of the farm of Mr. W. Marks, of Danby, Illinois, says that farming land in that vicinity has nearly doubled in price during the last four years. Good farms now bring from \$45 to \$50 per acre, and they are "rapidly increasing in value." Mr. Marks was recently a New York farmer. He has moved west, and gone extensively into sheep husbandry.

## Special Notices.

**Away with Spectacles.**—Old eyes made new, without Spectacles, Doctor or Medicine. Pamphlet mailed free on receipt of ten cents. Address E. B. FOOTE, M. D., No. 1130 Broadway, New York. au2t

## ADVERTISEMENT.

A FEW short advertisements of interest to farmers—and only such—will be inserted in the *GENESEE FARMER* at twenty-five cents a line, or \$2.50 per square, or \$25 per column, each insertion, payable in advance.

## THE GENESEE FARMER:

A MONTHLY JOURNAL OF AGRICULTURE AND HORTICULTURE.

Published at Rochester, N. Y., by

JOSEPH HARRIS.

**Terms**—INVARIABLY IN ADVANCE—One Dollar a year. In clubs of five and upwards, Eighty Cents each.

**HALLETT'S WHEAT & DWARF PEARS.** See *Gardeners' Monthly* for July. Price 20 cents. 23 North Sixth street, Philadelphia, Pa. ault

## "MAGIC PICTURE CARDS."

EACH Picture disclosing upon close examination much more than is at first seen! NEW, UNIQUE, CURIOUS, PUZZLING, and AMUSING. The whole set, with EXPLANATORY KEY, sent, postpaid, for 30 cents, or four sets to one address for \$1. AMSDEN & Co., Publishers, 14 Bromfield street, Boston. 1t

## IMPORTANT TO WHEAT GROWERS!

## The Diehl Select Wheat,

A N entirely new variety, and now for the first time offered to the public, is a CHOICE WHITE WHEAT, as early and as hardy as any Red Wheat, and yields at least one-third more to the acre.

For sale by A. M. HALSTEAD, New York, F. BISSELL, Toledo, Ohio, and by the subscribers in this city.

For sample of Wheat and further information, send 6 cents in stamps to T. J. & J. T. SHELDON, Cleveland, Ohio. au2t



## Seymour's Patent Tree Protector.

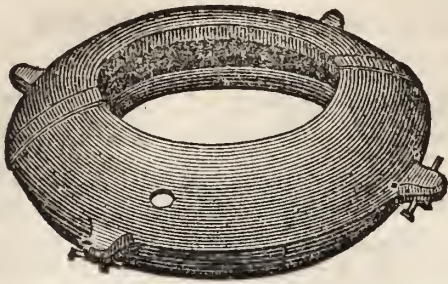


Fig. 1.

Fig. 1 represents the Protector with all the parts together, and showing the mode of fastening them. The small hole is designed for pouring in oil, and should be kept closed.

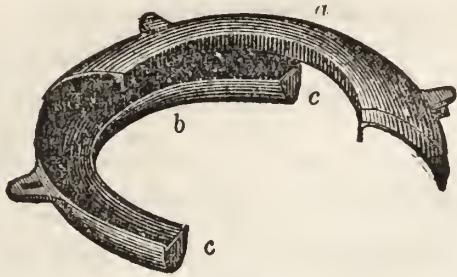


Fig. 2.

Fig. 2 represents a section of the same. The cover *a*, and the trough, *b*, are each a half circle. The ends of the trough, *c*, *c*, are closed on each section to prevent leakage.

If these Protectors are applied in season, they will catch the female moths (which do not fly,) of the tent caterpillar or nest worm, the canker or measure, and Palmer worms, and all other insects that crawl up the bark, and which are so injurious and destructive to our orchards and shade trees. It is believed that the currelio or plum weevil may be caught in this manner. The caterpillar moths go up the tree to deposit their eggs about the last of June or first of July, and the moth of the canker or measure, and Palmer worms go up about the first of October, and in the spring as soon as the frost leaves the ground. At all such times the Protectors should be applied. If properly attended to, we have no hesitation in saying that they will prove a sure protection against these terrible pests.

The cover is made to project over the trough towards the tree, resting on and the whole supported by four nails driven into the trunk at equal distances apart. It is designed to leave a space of about one-half inch between the cover and tree to allow for growth of tree. This is filled with a packing of twisted straw or old rope to prevent the insects passing through. The trough when filled with oil will catch and destroy all insects as they pass up the tree.

The Protectors are made of cast iron, nicely japanned, and of all sizes to fit any sized tree. We own the exclusive right to manufacture and sell them throughout the United States, and are prepared to furnish them in quantities to suit purchasers, from our manufactory in New Britain, Conn., and from our warehouse No. 53 Beekman street, New York.

WANTED.—One Hundred Agents to canvass and sell the above Tree Protector, to whom liberal inducements will be offered. None need apply without proper testimonials as to character, &c. For further particulars send for circular.

au2t

P. &amp; F. CORBIN, New Britain, Conn.

## SUPERPHOSPHATE OF LIME, BONE DUST AND MEAT AND BONE COMPOST.

MANUFACTURED BY

TASKER &amp; CLARK,

Cor. 8th and Washington Sts., Philadelphia.

THE manufacturers offer their Superphosphate to the public confident that it will be found equal to any similar article now in the market. Being made from finely ground bones (not burned); Peruvian guano, and other ingredients having manurial properties, it has been found a superior fertilizer for wheat, grass, &c., &c. Price \$65.00 per tun at the factory.

MEAT AND BONE COMPOST.—A valuable manure from refuse meat, bones and other offal from the slaughter-house. Price \$40 per tun.

BONE DUST—Very fine and pure at \$65.00 per tun.

Terms Cash. Address as above,

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TASKER &amp; CLARK, Philadelphia, Pa.

## TILE MACHINE.

THE BEST MACHINE IN AMERICA. Send for a Circular containing description. A. LA. TOURETTE, Waterloo, N. Y.

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## HUTCHINSON'S

CELEBRATED



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## WINE AND CIDER MILL.

LARGE and small sizes, greatly improved, for hand, horse or other power. OVER EIGHT THOUSAND HAVE BEEN SOLD IN TWO YEARS, giving unparalleled satisfaction. Send for Descriptive circular giving full particulars. Address au2t HUTCHINSON & BROTHER, Auburn, N. Y.

## WHITCOMB'S



## Metallic Spring-Tooth Horse Hay Rake.

THE above Rake is designed for hay raking and gleaning grain fields. As a gleaner after the cradle in the wheat field it will pay its cost in a single day. Thousands of Rakes of the above patent are manufactured annually. For economy, durability, simplicity and efficiency it is unequalled.

For Circulars, Rakes and for Territorial Rights in the interior and Western New York, and also Pennsylvania, apply to ault JOHN PARDEE, Lysander, N. Y.

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COURSES OF AGRICULTURAL INSTRUCTION—Including the Practice of Agriculture and Horticulture, Agricultural Chemistry and Physiology, Principles of Breeding and Feeding, Injurious Insects, Rural Economy, Forestry, French and German Languages, &c.,—

Open September 13th, 1865.

For detailed Programme, apply to

ju4t

PROF. GEO. J. BRUSH, New Haven, Conn.

## Old Eyes Made New

WITHOUT SPECTACLES, DOCTOR OR MEDICINE.

Pamphlet mailed free on receipt of ten cents. Address E. B. FOOTE, M. D., No. 1130 Broadway, New York. ju 4t



## GROVER & BAKER'S HIGHEST PREMIUM



ELASTIC STITCH

AND

LOCK STITCH

# SEWING MACHINES,

495 Broadway, New York,

AND

48 STATE STREET,

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## Sheep Wash Tobacco

I hereby certify, that I have been familiar with all the processes employed by the South Down Company in the manufacture of their "Sheep Wash Tobacco," and that the article prepared under Mr. Jaques' Patent contains all the useful principles of the Tobacco in a concentrated form.

This Paste, employed as a Sheep Wash, according to the directions furnished by the Company, has the effect of curing Scab and other cutaneous diseases, and destroying all parasitic insects which infest the skin and wool of the Sheep, and thereby improves the health of the animal, as well as the quality of its fleece. Employed in the same way, the solution being made stronger, it will destroy those insects which infest the skins of larger animals, and also those that are injurious to vegetation.

CHARLES T. JACKSON, M. D.,

Assayer to the State of Massachusetts, and

• Consulting Chemist.

Wool Growers should beware of any preparation that contains "sulphur," as it is sure to destroy the fibre of the wool. One pound of *Extract Tobacco* will make twelve gallons Wash, and contains the strength of eight pounds of Tobacco, as prepared by farmers.

**Agents wanted in every Wool District.**

JAMES F. LEVIN, *Agent South Down Co.*,  
23 Central Wharf, Boston.

\*\* Farmers, preserve this advertisement, and ask your storekeepers to keep the Wash for sale. A liberal discount to the retailers.

feb9t

## SAWING MACHINES.

WE are building a GREATLY IMPROVED CROSS-CUT SAWING MACHINE for cutting logs into stove wood, with two or four horse powers to drive them.

Also, a new style CIRCULAR SAW for cutting cord wood into stove wood.

Circulars describing our machinery sent promptly on application by letter. Write to JONAS W. YEO,  
my4t Proprietor Robinson Machine Works, Richmond, Ind.

## REDUCTION IN THE PRICES OF THE

## UNION MOWING MACHINE.

4 Feet Machine from \$170 to \$145.  
4 1-2 " " " \$190 to \$170.

## SULKY HAY-RAKES. CLEMENT'S HORSE HAY-FORK. HARVESTING TOOLS

Of all kinds constantly on hand.

HAINES & PELL,

27 Courtlandt Street,

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NEW YORK.

## Babbittonian Penmanship.

THIS SCIENTIFIC and SELF-TEACHING system, which is being ordered by the thousand and sent to every part of the Union, consists of nearly one hundred copies on self-explaining card-board copy slips, and will guide the learner to an elegant command of the pen without schools or teachers. Terms, post-paid to all parts of the Union, \$1.50. Terms to Teachers and Clergymen, \$1.

"The Babbittonian system of Penmanship is splendid."—J. H. Myers, *Spencerian Penman*.

"It is chaste and beautiful."—*New York Evangelist*.

"The most scientific and beautiful of systems. An editor of a religious journal has called it magnificent, and worth \$5 instead of \$1.50."—*Journal and Messenger*.

"Babbittonian Penmanship is far in advance of all other systems. 1st. It is more scientific. 2d. It gives a more complete elementary discipline. 3d. It is more beautiful. 4th. It is more practical."—E. M. Boggs, *formerly Spencerian Penman*.

"Admirably adapted to the end in view."—*N. Y. Observer*.

The system is unequalled for use of schools as well as private learners, great reduction being made. *Splendid terms offered to Agents.* A fine

## GOLD MEDAL

offered to the best Babbittonian Penman, and another for the best improvement from Babbittonian copies.

Send for Circular, or forward money for Penmanship to **BABBITT & WILT**, Principals of *Miami Commercial College*, Dayton, Ohio.  
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## Corn and Bean Planter Combined.

WE are manufacturing one of the most successful Two-Rowed Planters now in use. One man and horse can plant either in rows or checks from 10 to 12 acres per day, and do the work well. The machine is easily managed, and is of light draft for one horse. It is one of the greatest labor-saving machines of modern invention. Patented August 14th, 1860.

The demand for this Planter has continued to increase, until scores of them are now in use in Western New York, Michigan and Canada West.

Cash price at the Factory, \$25.00, subject to alteration as stock and labor may require.

Please order early. Several orders came too late last year to be filled.

Orders with cash will receive prompt attention. A liberal discount made to merchants and agents.

For further description, send for circular.

ap5t WHITESIDE, BARNETT & CO., Broekport, N. Y.

## THE LITTLE GIANT MICROSCOPE!

IS A NEW MAGNIFIER, of high power, for the examination of Living or Dead insects, Flowers, Seeds, Minerals, and thousands of other objects, and can be carried in the pocket or attached to a watch-chain. Price, \$1.

Beautiful Mounted Objects, \$1 per box.

Sent, prepaid, on receipt of price. Liberal terms at wholesale.

Address GEORGE MEAD, Thompsonville,  
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Also, the new and beautiful folding

## POCKET STEREOSCOPE,

which makes pictures look large and life-like. Price, \$2. Choice Stereoscopic Views, \$3 per dozen. Sent everywhere, prepaid.  
jy3t



BAUGH'S  
RAW BONE  
SUPER-PHOSPHATE OF LIME.

BAUGH & SONS,

MANUFACTURERS AND PROPRIETORS,

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REDUCTION IN PRICE.

After this date, June 12th, the price of BAUGH'S RAW BONE PHOSPHATE will be reduced to \$60 per 2000 lbs. (3 cents per pound) packed in good bags and barrels and delivered free of portage to any wharf or depot in this city.

SEND IN THE ORDERS EARLY.

Already the indications point to a very heavy trade in our article for the fall season, and although we have immense facilities for meeting a large demand with a prompt supply, we would strongly advise Farmers and Dealers to give us their orders as early as possible.

BAUGH'S RAW BONE PHOSPHATE

has now been before the Agricultural community for many years under ONE NAME and ONE PROPRIETORSHIP, and needs no further commendation than that accorded to it everywhere, in the continued and successful use by practical and discriminating farmers. Manufactured only by

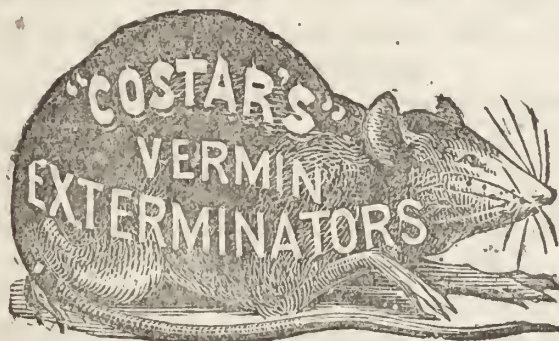
BAUGH & SONS,

No. 20 SOUTH DELAWARE AVENUE,  
PHILADELPHIA.

We recommend Farmers to purchase of their nearest Agricultural Dealer. jy2t

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1865.



"18 years established in N. Y. City."  
"Only infallible remedies known."  
"Free from Poisons."  
"Not dangerous to the Human Family."  
"Rats come out of their holes to die."

"Costar's" Rat, Roach, &c., Exter's,

Is a paste—used for RATS,  
MICE, ROACHES, BLACK and  
RED ANTS, &c., &c., &c., &c.

"Costar's" Bed-Bug Exterminator,

Is a liquid or wash, used to  
destroy, and also as a pre-  
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"Costar's" Electric Powder for Insects,

Is for MOTHS, MOSQUITOES,  
FLEAS, BED-BUGS, INSECTS ON  
PLANTS, FOWLS, ANIMALS, &c.

Sold by all Druggists and Retailers everywhere.

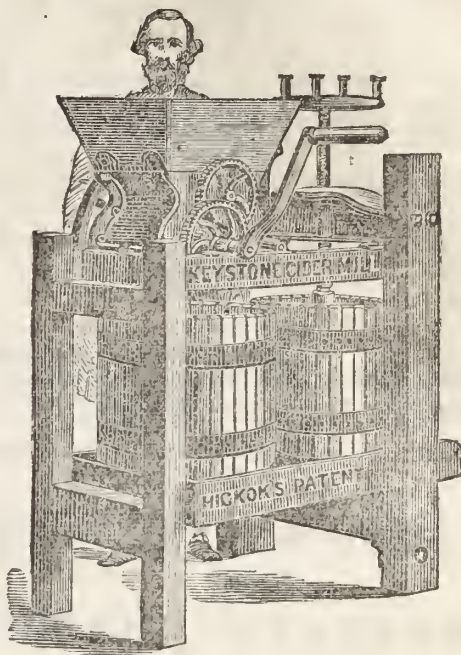
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See that "Costar's" name is on each Box, Bottle, and  
Flask, before you buy. HENRY R. COSTAR.

PRINCIPAL DEPOT, 482 BROADWAY, N. Y.  
Sold by all Druggists in Rochester, N. Y. jy3t

THE CHAMPION.  
HICKOK'S PATENT PORTABLE  
KEYSTONE CIDER AND WINE MILL.

12,000 in Use and all Approved.



THIS admirable machine is now ready for the fruit harvest of 1865, is made in the most perfect manner with either one or two tubs, and is well worthy the attention of all persons wanting such a machine. It has no superior in the market, and is the only mill that will properly grind grapes.

For Sale by all Respectable Dealers.

I also make two sizes of superior

Presses for Berries, &c., &c.

If your merchant does not keep them, tell him to send for one for you, or write for one yourself. Address the manufacturer, jy4t

W. O. HICKOK, Harrisburg, Pa.



New Patent Animal Fetters.

JUST the thing that farmers need for fettering Horses, Mules, and cattle, when turned out to pasture, to prevent jumping, running, escape, or damage. They are made of malleable iron, light, strong, and not liable to get out of order.

Price, \$2 50. Dealers in Hardware and Agricultural Implements, &c., please forward their names for full description and prices to the trade by the dozen, to

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335 Broadway, New York. jy-4t

**SUPERIOR FARM LAND!—20,000 ACRES AT LOW PRICES AND ACCOMMODATING TERMS.**—Franklin Tract, Gloucester county, New Jersey, twenty-five miles south of Philadelphia on railroad running from Philadelphia and Camden to Cape May. In lots to suit purchasers. Circulars, with reports of SOLON ROBINSON, Hon. WM. PARRY, and others, with full information, sent free, by addressing JOHN H. COFFIN & CO., Newfield, Gloucester county, New Jersey. Also, improved Farms from 20 acres upward. ap6t

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**THE**  
**CHAMPION FORCE PUMP,**  
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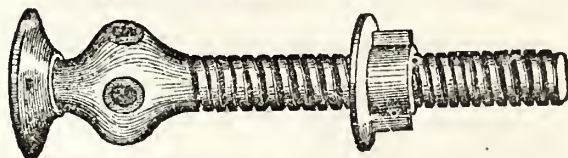
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# THE WESTERN FARMER

THE PRACTICAL AND SCIENTIFIC FARMERS OWN PAPER

VOL. XXVI. SECOND SERIES. ROCHESTER, N. Y., SEPTEMBER, 1865.

No. 9.

## WALKS AND TALKS ON THE FARM.—NO. 21.

**ABOUT RED ROOT.** I was telling you last month that the red-root was so abundant in my summer-fallowed wheat that I intended to plow the land this fall and plant it to corn next spring. John Johnston has kindly written me on the subject. He says:

"Since looking over the *Farmer*, I opened the letter to say you can not kill red-root with a corn crop. It will only vegetate in August and September, and, if warm, in the first two weeks in October, and in no other months of the year. If the land is pulverized in August, and plowed in October or in April, you will destroy a vast quantity; but if a clayey soil this has to be repeated for several years before it is all destroyed."

He says red-root has troubled him more on his farm than any other weed. He has paid \$500 for pulling and hoeing it out of his wheat. He conquered it at last, but it took many years. Where it abounds the plan is to summer crop for some years, and this will kill it or so reduce it that it will not be much trouble to pull up what there is in the wheat.

It seems to be a fact that red-root troubles no crop except winter wheat; and my plan for killing it was based on this fact. Treat your land in the fall precisely as you would were you going to sow winter wheat, and then kill the red-root in the spring by plowing, cultivating, &c. If we had a machine to hoe our winter wheat in the spring this would kill the red-root; but till we have such a machine, we must try to kill it, as Mr. Johnston says, by "summer cropping." But summer cropping in itself will not kill it. We must, by harrowing or plowing the land in August or September, cause the seed to germinate. This is the main point. After this is done the red-root can be killed by any course of summer cropping that is most convenient.

I suppose a good plan would be to harrow the wheat stubble (that is, of course, where the wheat is not seeded) as soon as it can be done conveniently after the wheat is off. This would start the red-root seed about the middle of September. Then give the field a good plowing in the fall and sow it

to barley or oats in the spring. Instead of this course I propose, in my own case, to *plow* wheat stubble in the course of a week or two—plowing it not very deep and harrowing it afterwards. This would cover up the stubble, grass, &c., and start the seeds of the red-root. Then, sometime before "snow flies," give it a good, thorough, deep plowing, and leave the land rough for the frosts of winter to mellow it. In the spring plow again, harrow, cultivate, &c., and plant corn. Then, if the cultivator and horse-hoe are used freely, there will be little need for hand-hoeing. Such treatment will not only kill red-root, but will destroy other weeds and leave the land in splendid order for sowing barley the next spring and seeding down.

Oh, yes, there *is* danger of plowing and working land too much; but there are few of us who are in danger of falling into this error, especially on rather heavy soils. The fact is that the majority of farmers do not more than half work their land. Time was when you could "scratch over" a piece of new land and get a fair crop of wheat. The soil was free from weeds and abounded in organic matter, derived from the leaves of trees, &c.; but that time is past. Our land is not "exhausted;" it still contains every element of plant-food that wheat and other crops require, but more labor is necessary to get these elements into a condition in which they can be taken up by the plants. It is hardly possible to pulverize the soil too much for corn or barley.

Last year Mr. Blank rented five or six acres of land to a young Irishman to cultivate as a market garden. The soil had been wretchedly neglected. The young man worked hard and kept the land clean, but the season was very dry and he did not get enough to pay his board. This spring Mr. Blank sowed it to barley and had the heaviest crop in the neighborhood. He got the benefit of the poor Irishman's hoeing and thorough culture.

I understand that many farmers in Irondequoit, which is [the great potato town of this county, are digging their crops of potatoes with the intention



of sowing the land to wheat. The crop is hardly worth the labor of digging, and some farmers are simply plowing them under. The disease has never before been so bad in this section. One farmer told me it was a thousand dollars loss to him. Potatoes have made the farmers of Irondequoit rich. Formerly the land was considered a worthless sand; it now brings a higher price than any other farm land in the county—and this has been brought about principally by growing clover and potatoes—the former for enriching the land, and the latter as a highly remunerative crop. Here, as on the sandy soils in Watervleit, near Albany, the potatoes are seldom attacked by the rot, and it is strange that this year the crop should suffer more than in other sections. Possibly the farmers have been running too much to potatoes. Some years ago, when I was connected with the *Country Gentleman*, I spent a day or two in visiting the farmers of Watervleit, and found that, as near as I could ascertain, about two-thirds of all the land was occupied with potatoes! The yield was not large, about one hundred bushels per acre, but there seemed to be no diminution, although little or no manure was used. I would like to know if the same system is still kept up, and with what results.

My own potatoes look uncommonly well. Here and there a shoot shows symptoms of disease, but on the whole the crop never looked better. I gave the land a good dressing of artificial manure. There is a general impression that potatoes highly manured are more subject to the rot, but so far as I have experimented with artificial manures the very reverse is correct. On dry, warm soils, I should have little fear of making the land too rich for potatoes.

There is not much danger of making land too rich for any crop. I thought my beans this year would be too rank—that they would run all to vines. This is the common opinion, but if I mistake not it is an erroneous one. Certainly, so far as I can see, the beans which made the most vigorous growth are the best podded, and are quite as early as those on poorer soil. It was so with my peas. “You will have nothing but vines,” said one of my neighbors. “It will depend on the weather,” I said. “If it keeps on raining every other day you may be right; but if we have dry, hot weather, I shall expect a few peas at any rate.”

“You put ‘guano’ on.”

“Well, yes, a kind of guano. On the side nearest the road I put on a barrel of Tasker & Clark’s superphosphate per acre.”

“What did it cost you?”

“About ten dollars a barrel, and freight from Philadelphia.”

He then commenced a tirade against artificial ma-

nures, winding up with the comforting assurance—“It won’t pay; you will have nothing but vines.” I tried to have the last word, and observed that “at all events it has made the vines grow;” but it was no use; “It won’t pay,” he said, just as he got out of answering distance—“you will have nothing but vines.”

But he is mistaken. I not only had a big crop of vines, but they were very heavily podded and ripened up *earlier* and more evenly than any other peas that I saw in the neighborhood. I have not yet threshed them, but I am satisfied that they will turn out *better* than if they had not been so rank, and then I had *forty-six* good two-horse loads on the ten acres, the straw of which I would not sell for what the manure cost me.

Oh, yes, there are plenty of bugs in them. But the bugs, you know, do little damage till November and December. You can see the little grubs in the peas now. They will feed on the peas, but I will grind them up, and in turn let the pigs feed on them; and in this way there is comparatively little loss. Pea-meal is also splendid feed for horses, and in fact it is good for all animals. There is no trouble in finding use for the peas. If I have more than I need, I can sell them to the manufacturers of “coffee” in the city!

I am going to sow wheat after peas, and the question is, will it be better to plow the land once or twice? The Deacon is decidedly of the opinion that one plowing will be better than two. Mr. A—also agrees with him, and as they are both experienced farmers it requires a little nerve to stick to my own purpose of plowing twice. The Deacon, who is always able to give a reason for the faith that is in him, says that if I plow only once I bring up fresh soil for the wheat; but if I plow twice I shall have the same soil on the surface as the peas grew in. So far, so good. But I question if the roots of the peas did not go through the soil as deep as it was plowed, and exhausted the soil at the bottom just as much as at the top; and if this is not the case I shall at any rate, by plowing twice, bring to the surface the soil in which the superphosphate was sown. If there is no other objection, therefore, I think I shall stick to my original intention. The fact is, and I may as well own it, I am a little prejudiced against this once-plowing, “summer-fallow” system of wheat culture. It makes the surface soil too mellow, and leaves the under-soil too hard and cloddy. If these conditions were reversed—if the mellow soil was below and the clods above—I should like it better; and this is precisely what I propose to do with my pea-fallow. I plowed it as soon as the peas were off, and gave it a good dragging. I shall next roll it, and then harrow and cultivate till



it is as fine as I can get it. Then I will let it lie till just before I am ready to sow, when I will plow it up, harrow a little, and drill in the seed at once. The drill puts the seed in deep enough to reach the mellow soil, while the small clods on the surface seem to protect the young wheat plant.

"What time do you sow wheat?" From the 5th to the 15th of September. If the land is in good condition, rich and well drained, the middle of September is early enough. On poorer land it is thought advisable to sow earlier.

I have a piece of corn that is pretty forward. I intended to sow the land to barley in the spring, but I have now made up my mind that if I can get the corn off and the land plowed by the 15th of September, or even by the 20th. I will sow it to winter wheat. I do not want so much land in spring crops if I can help it. If the weather happens to be as favorable as it was this season, it is all very well; but if we have such a spring and summer as in 1864, the less spring crops you have the better. Get all the land into wheat that can be got in in good condition, and you have done with it for a year. At all events, strain a point to plow all the land you intend for spring crops this fall. Even if the land were no better for it, it would pay from the increased facility it affords for getting in the crops early in the spring. Keep your teams plowing every day if possible, even if you have to hire extra help to get in the corn, potatoes, &c. It will pay. It costs so much to feed horses that it is desirable to keep them steadily at work. I never let my horses rest a day, except Sundays, if I can help it. Feed them well, and they will do better at steady work than if allowed to lie idle half the time and compelled to work too hard when they do work. Another thing I do not like—stopping the horses to rest every few "bouts" while plowing. If the plowing is too heavy for two horses, put on three, and let them keep steadily at it. Go slow if need be, but keep going. I would use three horses for all kinds of field work if I could. One man can manage them just as well as he can two, and you save one-third the labor of a man—in fact you save more.

Yesterday I run a level through the low land on the south side of the road. It was supposed to be so low that it could not be drained. It is a rich, black soil, abounding, as the chemists say, in organic manure, which, if it could be rendered available, would produce immense crops of corn, oats and grass. There is a creek running through the south end, and the point was to ascertain what fall there was to this creek. But it was no light matter to get through the woods. We had to chop a road through, but we were encouraged at every new

sight of the level to persevere. We found a gradual fall, better than we had hoped for. It is certainly true that there is little land that is so level that it can not be drained. This land has been so long a profitless swamp that it was difficult to believe that it could be made the most productive land on the farm, as would certainly be the case if it could be drained. I had previously leveled through what seemed to be the natural outlet, but found there was not sufficient fall without cutting a long ditch through Parish's land, and as I have land enough of my own that needs draining I do not feel like volunteering to ditch that of my neighbors. The Deacon, who is an old resident and knows the land well, put me on a new track, and, sure enough, I found a fall of *ten feet!*

Now for a big ditch, and then for big crops of grass, and then for plenty of manure to enrich the upland portion of the farm. This low land has been receiving the soluble matter from the high ground, and now I hope for a chance to get it back again. This is the cheapest way of getting manure.

"Can't you draw the muck on to your land?" Yes, but I prefer to get it in a more concentrated form. Grow big crops on your low land, and these will make manure for your upland, and at considerable less expense. There is nothing like plenty of alluvial meadow-land to enrich a farm.

The Louisville (Ky.) *Journal*, of this week quotes "fair and good" cattle in that market at 4 to 5 cents per lb. live weight, and "common and rough" at  $2\frac{1}{4}$  to  $3\frac{1}{4}$  cents per lb., and "extra quality" at  $5\frac{1}{2}$  to 6 cents.

In Albany cattle range from 5 to 10 cents per lb. live weight, according to quality. These figures show two very important facts. *First.* The advantage of raising and feeding cattle of good quality. This is of equal importance east and west. *Second.* These figures show the advantage our farmers have in living near a good market. The price of cattle in this State is about double what it is in the West.

Looking at our agricultural position in what light we may, every thing points to the one central truth that good farming is more profitable than poor farming. You say this is a self-evident truth. But if so, there are few farmers who seem to understand it, or at least to act as though they believed in the advantages of good farming. Why will a man continue to sell cattle at 5 cents per lb. when he can get 10 cents? In other words, why keep an animal three or four years and sell it for \$50, when, even if it weighs no more, he can raise one that will sell for \$100? Or, taking the Louisville figures—why sell a bullock that weighs, say 10 cwt. for \$27.50, when for a bullock of better quality, but which weighs no more, you can get \$60? In point of fact,



however, these figures are far from representing all the advantages. A good grade Shorthorn, at two years old, well fed, will weigh as much as a four year old "scallawag". He consumes only half the food and brings double the price.

I was talking to an Englishman to-day, and remarked that I thought many farmers in this section put their wheat in too early. "Yes, sir," he said, "they do." "Old Mr. W. used to put in his about the 20th of September, and he raised the best wheat in the neighborhood. One of his neighbors who used to sow the last week in August, once said to him: "You don't sow early enough." "Well," he replied, "What is the reason, then, that I get better wheat than you do?" "Because you plow more than I do." "Well," he said, "I *do* plow more. Sometimes the boys want to sow as early as you do, but I tell them the land needs another plowing, and set them at it, *simply to keep them from sowing so early.*"

You may think it strange, but I question if the best farmers in America are not to be found in Upper Canada. They beat us in raising wheat; their barley is certainly superior to ours in quality, and I think the same is true of oats. In the cultivation of root crops we are nowhere. Don't get angry. We beat them in raising corn—and in all crops which partake rather of a commercial than a strictly agricultural character. We are willing to raise small crops if we can get large profits, while a Canadian farmer, partaking largely of the Scotch and English conservative character, continues on in the even tenor of his way. He is not so constantly looking for some easier method of earning a living. He is a farmer, and his father was a farmer before him, and he intends to live and die a farmer. If the midge destroys his wheat he does not, as we did in this section, propose to turn the whole country into one grand apple and pear orchard. He looks out for some variety that will ripen sufficiently early to escape the ravages of the insect.

I have often remarked that where a new kind of wheat has been alluded to in the *Genesee Farmer*, it attracts more notice, ten times over, in Canada than in this section. A few years ago I induced some gentlemen to contribute a few hundred dollars to get up a wheat show. We offered large premiums and managed by personal persuasion to induce a few farmers to show their wheat. The affair was essentially a failure. Had it been a big pumpkin show it would have been a grand success. The entries of wheat at the Provincial Show are three times more numerous than at our own State Fair, even when held in the center of the wheat-growing districts, and the number of people which crowd around the samples, shows the interest which is felt

in the matter. The Diehl wheat, advertised in the *Farmer* last month, attracted at once the notice of Canada farmers, and one of their agricultural societies sent a delegation to Indiana to inquire into its merits. They were so well pleased with it that they purchased *eight hundred bushels* for seed. Such enterprise is commendable. No wonder they beat us raising wheat.

This Diehl wheat closely resembles the Soules, and I should not be surprised if it turns out to be this variety. Its chief merit is its earliness, and it is probable that this quality is due to the fact that it has been grown for several years in a more southern latitude. There can be no doubt that, so far as earliness is concerned, we should get our seed wheat from a more southern rather than a northern latitude, and I have no doubt that should this Diehl wheat prove to be the Soules it will ripen earlier for two or three years than the Soules grown from seed raised here.

Few farmers have any idea what a great improvement can be made in the quality of grain simply by running it once or twice through a good fanning mill. This is the great secret in taking prizes for grain at our agricultural fairs. It is stated on good authority that at a Fair where several samples of grain were exhibited, an agent of Nutting's Fanning and Assorting Machine picked out the poorest sample and without the knowledge of the judges or exhibitor, ran it through the mill, and replaced it in the bag with the best portion on the top. The judges, much to the surprise of the exhibitor, gave it the first prize.

I have heard farmers assert that it does not pay to clean the grain—that the millers will pay no more for a good sample than for a poor one, and that consequently all they take out of their grain is so much loss to them. There may be individual cases where this is true, but as a general rule the millers avail themselves of the dirty condition of the grain to make the farmer submit to a deduction of four to five cents a bushel, and in some cases even more. Look at any report of the markets and note the difference in price of different qualities of the same grain. Take for instance the quotations at Chicago for spring wheat: "No. 1, \$1.30@1.32; No. 2, \$1.18@1.20; rejected, 77@79c." Now if a farmer should take 1,000 bushels of wheat, which would be classed as "rejected," and should, by the use of a good fanning mill, take out 411 bushels of shrivelled grain, he would, provided the remainder was equal to "No. 1," get a little more for the 599 bushels than for the 1,000 bushels of "rejected," and have 411 bushels that he could grind up and feed out on his farm. This is perhaps an extreme case, but it shows the advantage of marketing grain in the best condition.



## IS AGRICULTURE AS LUCRATIVE AS TRADE?

IN the *Genesee Farmer* for August, ("Walks and Talks on the Farm," page 234,) occurs the following sentence:

"The New York papers express the 'fear' that high prices of farm produce may become 'chronic.' But no such fears are entertained among farmers. We hope never again to see prices as low as they were before the war. We need higher prices. It would be better for the farmers and better for all classes, for it is a fact that the prosperity of the nation depends very greatly on the prosperity of farmers. Agriculture in this country has never been as lucrative as trade, and it is much to be desired that we should have a higher range of prices."

The *Country Gentleman* published this paragraph, and in the next number of that paper one of its correspondents, "Quercus," alludes to it as follows:

"On page 96, you quote from the *Genesee Farmer* the remark that 'Agriculture in this country has never been as lucrative as trade.' This is obviously an error. A careful examination made in New York city a few years ago, showed that less than five out of a hundred persons engaging in trade were finally successful—the remaining ninety-five or more ending sooner or later in failure. A similar estimate in Boston made the number three for success and ninety-seven for failure, so that if a very few traders become ultimately rich, the amount of money made by them in the aggregate is less than that made by the same number of farmers of equal energy and intelligence, when all taken together. In other words, three traders with two hundred thousand dollars each own less property than a hundred farmers of ten thousand dollars each."

"But a good farmer need not stop at this small sum. I know of many possessing farms of one hundred and fifty to two hundred acres, and some less than one hundred acres, who clear over a thousand dollars a year, besides comfortably supplying their families. Yet a thousand dollars annually continued for forty years, or from thirty to seventy years of age, with yearly interest added, with interest on interest, would amount to no less than two hundred thousand dollars—a sum that not a few old farmers have laid up for themselves in old age. Taking a fair view of the subject on both sides, we shall have to admit that farming is the most reliably lucrative."

Admitting, for the sake of argument, that from ninety-five to ninety seven merchants out of a hundred fail, sooner or later, in business, and that on the other hand failures are very uncommon among farmers, what does the fact prove? We are aware that it has been quoted, over and over again, for the purpose of showing that agriculture is a more permanently money-making occupation than trade, but it proves nothing of the sort. The fact may well be held up as a warning to young men who wish to leave the farm for the purpose of engaging in trade, but it does not show that trade is less profitable than agriculture. The young man who went into a far country and spent his substance in riotous living, may have erred in leaving his father's house and

casting off its restraints, but it was not going into a far country that ruined him, but rather the riotous living. It is, in the majority of cases, the extravagant living of those who engage in trade and not the unprofitableness of trade itself, that ruins so many merchants.

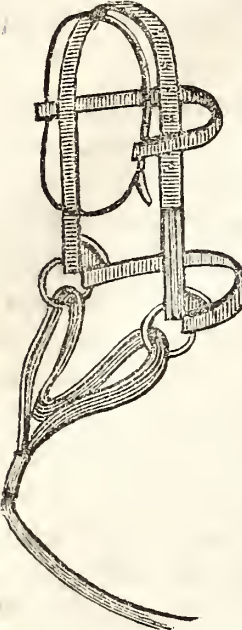
"Quercus" knows of many farmers of one hundred and fifty or two hundred acres who clear over one thousand dollars a year besides comfortably supplying their families. Such farmers have probably farms worth fifteen thousand dollars, with implements, stock, &c., worth five thousand dollars more. Here is a capital of twenty thousand dollars, with a clear profit of one thousand dollars, after comfortably supplying their families—the families, be it remembered, not unfrequently, in house, dairy or field, assisting in carrying on the operations of the farm. Does this prove that farming is more lucrative than trade? A man of average intelligence, with the industry, care, prudence, perseverance and foresight necessary to farm successfully, could hardly fail, with a capital of twenty thousand dollars, to make more money in trade than can be made by farming. That he or his children will be any better off in twenty years may be very doubtful—but this is owing to the extravagant style of living which the large profits occasionally realized tend to foster.

No; farming has not hitherto been as profitable as the interests of the nation demand. We need, and we believe we shall have, higher prices for our produce. It would certainly be better that farmers should receive more money for their produce and lay it out in improving and enriching the land, than that it should be taken by the "middlemen" and spent in fashionable amusements and extravagant living. A few weeks ago we inquired the price of potatoes at a grocery in this city. "Twelve shillings a bushel," responded the clerk, promptly; but apparently recollecting that we probably wished to sell rather than to buy, he quickly corrected himself and answered "six shillings." In other words, if we wanted to buy potatoes the price was twelve shillings; but if we wished to sell it was six shillings. We must prepare our land, plant the potatoes, cultivate and hoe them, run the risk of drouth and disease, wait several months for the crop, dig it, carry it to market, and then get no more per bushel than the grocer who simply passes it to the consumer.

This is perhaps an extreme case; but we are satisfied that at present the "middlemen" get more than their due proportion of profit. Of course these things will right themselves, and we can not but think that farmers will in future get a fairer compensation for their labor and skill than has hitherto been the case.



## HALTER FOR HORSES THAT PULL AT THE POST.



A CORRESPONDENT responds to an inquiry for a way to manage horses that pull at the halter, by sending the accompanying drawing of a halter which he has been in the habit of making and using for many years. The construction, as may be seen from the engraving, is very simple. It is held upon the head by a throat-latch like a bridle, and the end of the leading strap passes through the ring on each side, and is sewed strongly to the strap about fourteen to eighteen inches from the end. When the horse pulls, this loop in the strap tightens powerfully, drawing the muzzle piece, and pressing the rings against the jaw on each side in a way, doubtless very uncomfortable, but not so as to injure the horse at all; besides the draft chiefly comes upon the muzzle and not upon the head

or neck, as is the case with common halters.—*American Agriculturist.*

The above plan is similar, though a little more complicated, than the common one of passing the "rum-strap" through the ring of the bridle on the opposite side from which it is fastened. We once did the same thing with a small hitching chain, in fastening a spirited mare. She tried to break away, but did not succeed. The chain hurt her so much that she would never, when so fastened, make a *deliberate* attempt to break away; but it frightened her so much that every time she was tied she would tremble all over, and the least thing would startle her. We gave up the plan, and now use a strong halter that does not hurt her, and have had no trouble. If we had a stupid, pig-headed horse that broke his halter from sheer perversity, we would use such a plan as the above and let him pull till he was tired; but with a horse that breaks away with a sudden jerk from fright, a strong halter, with uniform gentleness, would be much more likely to effect a cure.

MARYLAND AND VIRGINIA LANDS.—Taking the District of Columbia as the climatic average of the two States, my experience here is that a man working four days in a week, may produce as much food and other necessities of life in a year, as he can in Central New York by working six days in a week. This problem is based on natural agricultural forces, which are as reliable as night and day, summer and winter.—*Daniel Lee.*

This is probably true, *provided he has equally rich land from which to produce it.*

A GOOD AND BAD HARVEST.—An English paper says that "the difference between a good harvest and a bad one in the United Kingdom is equal in money value to some fifty or sixty millions sterling."

## CURE FOR RINGBONE.

EDS. GENESEE FARMER: In the July number of the *Genesee Farmer* Mr. Horatio G. Lawrence inquires for a remedy for ringbones in horses. I would say that I have found balsam fir, which can be bought at the druggist for from ten to fifteen cents an ounce—very useful. The first I knew of its being used was on a three-year old colt belonging to Mr. John Gounery. The colt was badly ring-boned on both hind feet, and the lameness was entirely removed. Mr. G. still owned the colt at the time of her death, which occurred more than twenty years afterwards, and during that time she done good service both on the farm and road, never showing any indications of lameness from the ringbones. Since that time I have known it used with good success in a number of cases—most of the cases being on the hind feet. Whether it would be as efficacious on the fore feet I do not know, but know of no reason why it should not. To apply it, rub it well all over the ringbone with the hand, and then with a hot iron bathe it in pretty well once a day for four or five days—longer if necessary. Should it start the hair, apply a little salt grease to bring the hair out all right.

J. M. POSE.

Yates county, N. Y., August, 1865.

## ANOTHER REMEDY.

EDS. GENESEE FARMER: Having seen in my July number of the *Farmer* an inquiry of Mr. H. G. Lawrence, of Flat Brook, N. Y., as to a sure, harmless remedy for ringbone in horses," permit me, a Down South M. D., farmer and stock-raiser, to furnish through the *Farmer* one which I have found very efficacious, but not infallible. Having owned many thorough-bred Conestoga horses and mules, some of which had exostosis of the different bones, called by farriers ringbone, and knowing from experience the value of iodine in analagous cases in the human subject, I was induced to test its efficacy in combination with excitants on a valuable blooded mare that had chronic ringbone, and succeeded in effectually removing the osseous structure. I have subsequently applied it in many cases with the same happy result. The following is the formula: Tinc. iodinii, tinc. capsici, tinc. camphoræ (fort), ol. origani, one ounce of each; spt. vini gallici, four ounces. Prepare the part with soap and water; wipe perfectly dry; then take a smooth round stick and rub briskly a few minutes; apply the mixture three times a day, rubbing it well in; then fold a woolen cloth two or three thicknesses and bandage moderately tight. These means are in a great majority of cases effectual, but if any reader knows of a better I would be pleased if he would communicate it.

P. P. MOORE.

Mt. Pleasant, Hanover county, Va.



## PRESERVATION OF FOREST TREES.

WE have endeavored to avail ourselves of all proper occasions, to impress upon our generation the importance of exercising greater care in the preservation of forest trees. It is lamentable, in view of present ruthlessness, and the demands of posterity, to observe the utter disregard manifested by the American people, not merely for the preservation of extensive groves, but the indifference which they exhibit for valuable trees, the destruction of which is not necessary to good cultivation, and the existence whereof would not only add greatly to the value of their property, but contribute vastly to health, the fertility of their farms, and the comfort of their live stock. We have seen thousands of farms rendered less productive and of much less intrinsic value by the destruction of timber, especially on their north and west boundaries, where they protect from the colds of winter, and others made unhealthy by removing the barriers which nature had placed to the encroachments of miasm.

We remember, upon an occasion of remonstrance with a farmer against destroying a beautiful isolated tree in a large field, his foolish reply in extenuation of his labor, that it supplied a resort for the black-birds which destroyed his corn, nor could he be persuaded that its use by the birds which protected his fields through a long series of years from insect depredators, much more than compensated for the few corn-hills torn up by the enemy of the grub-worm, nor dissuaded by the representation of its benefits in supplying shade to his cattle. His plea was, that if we had experienced like labor with himself in eradicating the original forest, we would not manifest such fondness for trees. Were the half of that farm now possessed of so much of its "original forest" as might have been preserved, without any restriction of its uses for necessary purposes, it would be worth double the present value of his entire estate, while we doubt not that the other half would have yielded more income than he has derived from the whole, and have increased in value. No one better understood the importance of belts of timber as protection against the inroads of fever, than the judicious and philosophic Dr. Benjamin Rush, of Philadelphia, who in 1798 assigns one cause for "the unusually sickly character of Philadelphia after the year 1778" to the "meadows being overflowed to the southward of the city, and the cutting down by the British army of the trees which formerly sheltered the city from the exhalations of the ground."\*

Dr. Rush refers to the fact of residences in the southern country becoming untenable from like

causes—the cutting down of groves near dwellings. Through ignorance and want of taste, labor and expense are thus misappropriated, producing injurious consequences, not only to the present but to future generations. Every well-managed farm should support sufficient timber to admit of an abundant present supply for all necessary purposes of fuel, fencing and building, without reducing the quantity necessary for like uses by posterity, and by the exercise of discretion the amount of land appropriated to this end will be found less than is generally supposed, although, judging from the too general practice, it would appear as if we presumed that posterity would have but little use for timber. Apart from the increasing value of timber in every section of our country, our farmers do not seem to comprehend that they are destroying that which in a little time would prove the most attractive feature of their estates. Groves restrain the sweeping winds in winter from divesting the surface of that soft and protecting covering and important fertilizer, the snow, the gradual melting of which in spring converts the stones into food for plants, while in the summer they supply an invisible but important moisture of the crops, and in the heated day enable them to enjoy the full advantage of the dews of night, and supply agreeable places of recreation for developing the intellects and bodies of our children, ever associating with their minds through life, recollections of pleasures the happiest of their existence, which made home a place of joyous contentment. And who that has experienced the pleasure, would exchange it for that derivable from other examples of practical operations, the gratification yielded by mature, beautiful forest trees which he preserved, protected, and pruned when they were but unseemly shrubs, especially when his children and their children derive from them their happiest annual enjoyments? He whose farm is destitute of groves should procure or plant them at once, being encouraged by the fact that from the seed, with good attention, he may have nut-bearing chestnut trees in eight years; and while your houses and barns are failing, these will be improving. But in addition to the luxury, ornament, and value of groves, wherever they are cherished with proper attention, they confer a dignity upon their possessor and ennoble the pursuit of agriculture. That was a sage injunction of the dying Scotch laird to his son: "Jock, when ye hae naething else to do, ye may be aye sticking in a tree; it will be growing, Jock, when y're sleeping;" words of wisdom "tauld" him by his father, "sae forty years sin;" but which he regretfully confessed not to have heeded.

While treating of this subject we can not refrain from reference to that bad taste, so frequently ex-

\*Medical Inquiries and Observations: Philadelphia, 1789, p. 86.



hibited, of introducing exotics for ornament, or to supply shade, to the neglect of the beautiful native forest trees, which are so easy to be obtained by all—not that we have any objection to such, under appropriate circumstances, but to adopt them to the exclusion of the more attractive and useful trees with which our forests abound, betrays a want of taste as well as deficiency in judgment.—*Census Report.*

#### CLEAN PIGS AND DIRTY PIGS.

Pigs enjoy the reputation of having a real liking for dirt; and, certainly, the way in which they are kept on some farms would show that their owners are determined to give them ample opportunities for carrying out this liking. No notion can, however, be more erroneous than this, as none is certainly so productive of loss to the keeper. Let any one not convinced of this try the two modes of pig-keeping—the dirty and the clean—the food in both cases, and other general treatment, being the same; and the result will show him which of the two is the best in the end. A great deal depends upon the mode in which they are housed. Mr. Raines, of Mills, adopts the following: A large out-house is inclosed at the sides, so as to be warm and dry. The floor is paved, and sprinkled over with burnt clay, and ashes obtained by burning weeds. In this the pigs are fed: while for resting and sleeping they have a compartment railed off at the other end, and which is amply provided with clean straw. In another case, the principle of box feeding has been applied, the pigs being kept in a pit, into which the manure from the ox or cow-stables and the horse-stables is put. The pigs tread this down, and enjoy themselves amazingly. In one case, where this plan has been adopted, the farmer states that his pigs “have given him a profit by their meat, and left the dung—as good as guano—for nothing.”—*Mark Lane Express.*

**MANURE-PITS.**—Professor Voelcker recommends that “the sides and bottoms of manure-pits should be rendered impermeable to water, either by clay-pudding or hydraulic cement; that the bottom of the manure-pit should be in a slightly-inclined position, so as to carry the liquid manure and drainings into a manure tank, which should be close by. The tank should be provided with a pump, so as to return the liquid matter to the heap in dry weather. The heap should likewise be well trodden.”

ACCORDING to Johnston, while a Holderness cow gave 29 quarts, producing 1 pound of butter to the 12 quarts, an Ayrshire cow gave 20 quarts, and 1 pound of butter to the 9½ quarts; an Alderney cow gave 19 quarts, and yielded 1 pound of butter to the 12 quarts; a Devon cow gave 17 quarts, and butter at the rate of 1 pound to the 9¼ quarts.

#### FORTUNES SUNK IN FARMING.

J. J. THOMAS says he knows a farmer over sixty years old, who has worked hard for more than forty years. He began with a good one hundred and fifty acre farm given him, but subject to an incumbrance of about one-third its value. This was a good start. He is, after a lapse of forty years, still in debt. He is temperate; had he not been, his farm would have gone long ago. He has worked hard; had he not, he must have failed. He has been economical, in its common meaning, or he never could have kept even with his creditors.

What, then, has kept him back in the world? Mr. Thomas has been figuring up, and finds that he has virtually sunk three good estates by want of management.

*First.* In wintering his cattle and sheep. He kept, generally, about twenty cattle and one hundred sheep. The cattle trod about three tons of hay under foot each year, and consumed half a ton each extra by exposure to the winds, in all thirteen tons, worth \$91. This exposure of cattle and calves reduced their size and market value one-third—annual increase, six head, and average value lost, \$8 each—\$48. Ten per cent. of his sheep and lambs were lost by want of shelter, and the clip was diminished 25 per cent. from the same cause—total loss on sheep, per annum, \$50. The whole yearly loss on cattle and sheep was, therefore, \$189. In forty years this annual loss, with compound interest, would amount to about \$35,000. Thus one fortune has been sunk.

*Secondly.* In a want of good rotation of crops. He raised wheat after wheat, oats after oats, and corn after corn, because the stubble was most easily plowed, till his land was exhausted and full of weeds. The crops, as a whole, scarcely paid his labor. A good rotation would have safely given him one-third more, which would have been a clear gain, on an average, of at least \$5 an acre, on about fifty acres, yearly—total, \$250 a year. This loss repeated for forty years, and interest, would amount to more than \$50,000! This was the second fortune sunk.

*Thirdly.* In raising crops of weeds. Some of his pasture fields had a heavier growth of mulleins, rag-weed, johnswort and thistles, than of grass; consequently, at least half his land was wasted to grow them. On fifty acres of pasture, at least \$2 each were yearly wasted, to say nothing of the loss of grain by the Canada thistle patches, in retarding growth and preventing clean harvesting, and his greatly diminished crop of corn by fox-tail and pig-weed. The annual loss from weeds was, therefore, at least \$100—the amount of which, with interest, in forty years, would be \$20,000. The third fortune.



## STIRRING THE SOIL—A BAROMETER.

THAT stirring the soil during the growing season prevents drouth to a great extent, is certain. If we spade the ground deeply during a drouth, and the ground is hard and dry, we find it soon becomes moist. By lifting the ground and exposing it while cool to the warmer air of our hot summers, the vapor which is always in the air is condensed or deposited on the newly-exposed surface, and is, as often as repeated during the drouth of the most decided benefit. But after the rain has come let the ground rest until it becomes again dry enough to pulverize when moved. No person who has ever used a spade and his eyes at the same time, can fail to see this. But a very large majority practice the very reverse of this. Their ground is so hard and so baked that nothing can be done until the rain comes so that the crop is ruined in waiting on Providence to send a shower. It is of no use, say these grumblers, to contend against nature. We have got a bad season says one, and it is of no use killing ourselves in trying to coax a crop to grow in a bad season, and we a'int a-going to try. I drove to the village on Monday, the 12th, and found plenty of mourners for the drouth standing round and bewailing the dry weather. "Well," says I, "if you have any thing to do before the rain comes, you had better be about it, for it is coming." "Aye, but when?"—"O, in a day or two—this week certainly," says I. "How did you find that out?" says one. "Well, no matter now, I have no time to explain; but come to my place some time and I will show you; but the rain is certainly coming. So get out your cabbages, plant your turnip seed, and I will warrant they will grow."

Sure enough on the Wednesday the rain came and continued coming; and now we have enough. It was a glorious and abundant rain, not a shower, but a succession of showers for three days. But said Mr. Grumbler, "Tell us how you knew the rain was coming." "Well, I will. My house contains five inside doors, all of black walnut (*Juglans nigri*;) about one and sometimes two days previous to a rain, these doors will crack and snap, often loud enough to wake us from sleep; and an outhouse has a door made of two pieces of walnut matched and battened together. The lip of the inside groove is split from the top to the bottom, and during a dry time the groove is tight and snug as when first made, but just previous to a rainstorm the lip of the groove swell out, so we can slip a finger underneath it. During five years this has never failed. It is certain and infallible, and answers all purposes of a barometer, and is quite as certain and reliable.—*Cor. Germantown Telegraph*.

THERE are between 30,000 and 40,000 acres of abandoned land in Virginia.

## TILLAGE AND AMMONIA.

THIS same gas has one remarkable property among others—it loves those, and falls on those, and blesses those who prepare for it and receive it kindly. It falls with the occasional shower, not to mention the nightly dew, but like that dew it hates a stale surface. On a road, a neglected fallow, or any hard impervious sun-baked surface, it absolutely refuses to perch or settle; so if you wish to attract its sweet and sovereign influence, stir the surface—nay, keep it continually stirred; and no matter how coarse the subsoil you have brought to the top, the quantity of ammonia you may absorb in a single summer is such that, you may laugh—or mourn, as you please—at neighbor Drychaff's dung-cart, that creaking hearse that is carrying to the field the dead body whose departed spirit has descended weeks and months ago upon your acres, by the care you have taken to attract it. You may "call spirits from the vasty deep" and from the dry land, and from every dung-hill, or other mass of decaying animal or vegetable matter for miles around you; and "they will come when you do call for them," which is more to the purpose—if only you will do one thing—keep your soil in the condition to attract, receive and retain them.—*Hoskyns*.

## A NEW REAPING MACHINE.

REAPING MACHINES have attained such a degree of perfection as to leave nothing to be desired so far as the cutting of the grain is concerned; but the *binding*, which is the heaviest part of the labor of harvesting wheat, has still to be done by hand. It is true that machines for binding have been invented, which, as the pomologists say of new varieties of fruit, "promise well;" but it will be sometime before they are generally introduced. In the mean time, it appears from the *Prairie Farmer* that a reaper has been invented in Illinois which saves more than half the labor of binding. The grain after it is cut falls on an endless apron revolving towards the side of the machine. The apron is provided with teeth which carry the wheat over the driving-wheel and drop it into a trough. There is a platform on the side of the machine where two men stand and bind up the grain, dropping the bundles on the ground. It is said that one man, after he gets used to it, can bind as fast as the machine cuts. It is manufactured by Messrs. Easter & Gammon, of Chicago.

BELLS will prevent the depredations of dogs among sheep. The reason is plain. A dog that knows enough to kill sheep knows enough to be still and sly about it. The great noise caused by a number of bells makes him fear for his safety, and he leaves without doing damage.



## FATTENING ANIMALS IN A HURRY.

WE have pointed out in former years the futility of attempts to lay heavy masses of flesh on poor cattle by stuffing them with rich food. Such attempts not only prove to be failures, but are always wasteful. The material consumed is nearly lost, the animals remain comparatively poor, and the owners are convinced that fattening animals for market "don't pay."

It is perhaps well for the cause of good management that all neglected treatment of animals should result in loss to the owner. If he has starved his cattle, sheep and pigs for a year or more, he can not atone for it by sudden attempts to push them to fatness. On the contrary, the only true way is to see that growth continues without cessation, summer and winter, from the earliest period of their existence till they are finally sold in market. A single check given to this continued progress may arrest or retard it for months. Our own observations lead us to the opinion that the whole profits resulting from raising and fattening, when this continued progress is kept up by careful, regular but not extravagant feeding, are at least triple the amount realized from early neglect and heavy feeding afterwards—and often the difference is many times greater than here stated.

There is nothing that should be more strongly impressed on the mind of the young farmer who makes the feeding of animals a prominent part of his business, than the importance of keeping up an unremitting growth throughout the whole course of their existence. The most successful pork-raiser with whom we are acquainted, adheres strictly to this course; not only feeding his store pigs well and regularly through fall and winter, but commencing the fattening not merely in autumn, as is too commonly the case, but *early in the spring*.

It is objected that this management is too expensive. This objection is urged by those who find two or three months only to consume more than they can afford. They feed heavily for a short time, but do not receive a corresponding return of increased flesh. "If two months feeding," they inquire, "costs us so much money, how can we ever afford to continue it for two or three years?" It is very true they can not, because the whole system which they adopt is a profitless one. Fortunately it does not require heavy feeding to keep up the continued growing condition of animals. Here is a great error into which many have fallen, which we have endeavored to correct. John Johnston made the remark some years ago that the copious feeding of grain or meal to cattle is no better than a moderate amount. We gave the statement some years ago of experiments performed by G. H. Chase, of Cayuga

county, who carefully weighed every week all his fattening animals. A daily supply of four quarts of barley meal to a fine steer, gave a weekly increase in weight averaging eighteen pounds. A neighbor advised him to *push* him, and eight quarts were accordingly fed daily. The weekly increase of flesh was less than when he received four quarts. The amount being increased to twelve quarts per day, he gained nothing at all. Several similar instances have come to our knowledge, and among others a fine animal was recently fed by a neighbor a peck or more of rich meal per day. After thus urging on the fattening process as he supposed, for several weeks, he was finally sold and proved to be only a few pounds heavier than when purchased. The many bushels of feed which he had consumed, and the labor of attendance given him, literally went for nothing.

Successful feeders, who prove all their experiments by weighing, have long since ascertained that animals in fine condition will lay on more flesh for the amount of food eaten than those of inferior character. Hence shrewd men will not purchase lean and raw-boned animals for fattening. This fact serves to establish the truth that all animals at all stages of growth should be kept fleshy. It need be scarcely necessary to remind any intelligent manager that the difference between attending to all the comforts of an animal by cleanliness, good wholesome food given regularly and in moderate quantity, and neglecting all these particulars, is simply the difference between those in fine healthy condition and such as are feeble and raw-boned. It may be laid down as true, with scarcely an exception, that the farmer who carries on the business of fattening at a loss, is one who neglects at one time and over-feeds at another.—*Country Gentleman*.

MEXICAN FARMING.—The capabilities of the soil of Mexico have never been tested by the application of the modes of cultivation prevailing in England and the United States. No one can judge of what it is capable by the present system of Mexican farming. Yet we see results here with little help from man, which would astonish the farmers of New England. To this day plowing is done here by a *pointed stick* attached by a pole to the horns of the oxen. The plow, than which Adam could not have used a more rude and inefficient implement, penetrates the soil three or four inches, forming a drill into which the corn is dropped. Barley, the staple grain crop, is scattered over the surface among the weeds, and then plowed in. Manure is chiefly used to mend the roads. And yet the "haciendado" gets a rich return for this sort of cultivation.



## THE CULTIVATION OF WHEAT.

WHEN we look at the low average of the wheat crop in the old settled States, and the fast decreasing average in the new, (except in new land,) we must conclude that there is some mismanagement with regard to the crop—and if so, what is it? In the first place, I am convinced that our usual rotation by making wheat follow the oat crop, is wrong and exhausting.

In Europe, two white straw crops are rarely if ever taken in succession. Their average, with attention to the production and collection of manures and their proper application, is constantly increasing, and why should not ours do the same with equally good management? It may be denied by some that the wheat-growing properties of our land are impaired. Of such I would merely ask, why they do not grow the finer kinds of white wheat as formerly? The answer I think would invariably be, because we can not. And does not this most conclusively prove that our lands have deteriorated?

I alluded to the proper application of manure. I do not think that wheat is the crop to which barnyard or stable manure should be applied directly. It has a tendency to produce an over-luxuriant growth of straw, to the injury of the grain; yet we all know that we can get neither straw nor grain, when wheat is taken after oats, unless we do manure, and that pretty heavily. This goes far to prove that the one should never be made to follow the other. I can not conceive why this objectionable feature in our rotation should have worked itself into such very general favor, except its conveniences and apparent profitable occupation of the land between the corn and wheat crops. Instead of making oats a preparation for wheat, I would suggest sowing clover seed with it, or dispensing with the oat crop entirely and taking barley in its place, also to be sown with clover seed, (with this latter crop clover succeeds remarkably well) and then plowing the clover sward for wheat the following year. If the land is in high condition, the first crop of clover might be made into hay or pastured, and the second growth plowed under for the wheat crop; but if the land is not very fertile, and it is desired to increase its productiveness, I would advise turning under the growth of the whole season. This would leave the manure to be applied to the corn crop, where I believe it would be more beneficial than to the wheat, as applied under the usual system; or it might be used for top-dressing the grass lands. Clover is an excellent crop to precede wheat. The heaviest crops of wheat I ever succeeded in raising, were sown on clover sward. In plowing under clover I prefer waiting until it has perfectly matured. Many prefer plowing when it is in full bloom, but this does not

coincide with my experience. It is true that there is apparently a greater amount of vegetable matter upon the ground at the time of flowering, but it is too sappy, and disappears very soon after being turned under, in consequence of a too rapid fermentation taking place.

The objection may be raised to plowing down a crop of clover, that it is an expensive mode of manuring, but this I think is incorrect; for the expense should not be counted at a higher figure than the interest on the cost of the land with the value of the clover seed added; and it is impossible to manure as cheaply and at the same time as effectually in any other manner.

Thaer, in his work on the "Principles of Agriculture," after enumerating a number of crops suitable to be grown before wheat, concludes by saying, "Lastly, the best way of obtaining good crops of wheat, is to sow the grain on broken up clover land;" and he farther recommends that the clover should be plowed a month previous to sowing the wheat. This recommendation coincides with the practice of many of the best farmers in England, who prefer sowing wheat on a stale furrow, under the impression that land which has become somewhat compact in consequence of having had time to settle, is more congenial to the growth of wheat, than that which has been recently plowed. It is also thought important not to have the ground too finely pulverized, as the grain is supposed to stand the winter better when the land is somewhat cloddy on the surface. This is also the opinion of many of the most successful wheat-growers in the interior of this State, and it also coincides with my own experience. The reason for preferring a cloddy surface is, that it does not so readily form a crust after showers, and the clods as they crumble to pieces during the winter and spring, supply fresh, mellow earth to the roots of the plants.

Another important point is the mode of sowing, whether it is better to drill or sow broadcast. Drilling has certainly become very popular, and not without some good reasons, among which the following seem to be the most important. The wheat may all be drilled in a short time, at the proper season, the land having been previously prepared—and in case of rain interrupting the work, it is finished without any after harrowing, which must often be done if sown broadcast, when the land is too wet, or perhaps must be delayed until the grain has sprouted. The seed is also deposited at a regular depth by the drill, and is thought to stand the winter better than when sown broadcast and covered with the harrow. But the greatest advantage to be gained by drilling seems to be entirely overlooked by the farmers of this country. In England and Scotland drilling is only resorted to on account of the increased facility



it affords for *hoeing* the crop, and not with any idea that it increases the yield unless it is hoed. A series of experiments made in Scotland, in the vicinity of Edinburgh, to test the relative advantages of drill and broadcast sowing, pretty conclusively established the fact that whenever the drilled wheat was hoed, the yield was greater than the broadcast, (not hoed.) But when the drilled was not cultivated, the superiority was on the side of the broadcast, thus showing conclusively that the increased yield of the drilled wheat was attributable to the hoeing and not to its being drilled.

All things being equal, I incline to the opinion that broadcast generally succeeds better than drilled wheat. In drilling, the grain is too closely deposited in narrow rows to allow the roots sufficient space to grow without interfering with each other; much of the grass seed is also washed into the drills by rains, so that we often have both grass and grain growing in narrow rows, much to the detriment of each other.

From the above remarks I do not wish to be understood as condemning the use of the drill, although I must acknowledge that I have lost much of the high appreciation I once had for it. My object has been to draw attention more particularly to the subject. It is one of much importance, and can be solved only by a close observation and actual experiment.—CHARLES E. HEISTER, in *Germanstown Telegraph*.

#### CORN HARVEST.

EDS. GENESEE FARMER: One of the most important crops to the farmers of New York State is Indian corn. In some localities this might not seem to be true, while in some others it is the main crop and dependence of the farmer in supplying bread for himself and family and in fattening their meats also. And yet there is no crop of which so large an amount goes to waste for want of right management in harvesting; and this may or may not be for lack of proper knowledge in the premises, as we find that men do not always do as well as they know. But it is on this point I propose to give you a little of my own experience in a few plain, straight-forward directions in this matter, and in doing so am obliged to assume that all my readers are unacquainted with my style of corn cutting, though to some I may only repeat their own way of doing the work. There are nearly as many ways of gathering the corn crop as there are farmers, and as a rule each thinks he has the *best way*. So I will give you my way of doing the work of cutting and setting up the shocks, and then speak of some of its advantages over any or all other ways of harvesting. We will assume that the corn was planted in rows each way,

though it would make but a trifle difference if it only rowed one way to put the corn into shocks. To put four rows of the standing corn into shocks: Begin with the end hill of the third row from the left hand, and as you cut that off pass to the end hill in the fourth row, then to the next hill on that and then to the other row and cut that off, and then bring the four hills you have up to the next hill ahead, and between the second and third rows and take the tops of the hill opposite to this in the second row and pass the tops of these two hills around each other and then around your four hills of corn and bind it, and you have the middle for a shock. Now turn to the next hill in your outside row and cut three hills ahead and set this up on the opposite, that is the forward, side of the two hills we had bound up for a center, and then turn to your left and cut out your square and set it around this middle, and you will have just twenty hills in your shock. Then bind the tops with at least two bands snug, and you have a shock of corn that will stand all the hard winds of this country, will cure both corn and fodder, and keep it in perfect good order, and without waste, and will stand there upright till New Year's if you like. Now I do not intend to give you the precise number of hills you shall put into a shock, for that must vary with the heft of the crop on the ground. But the theory of doing it in this regular, systematic order and thus making your shocks all in straight rows, and of just the same or nearly the same size, the rows being the same each way across the field.

The advantages of this you always realize if you wish to drive your team through your field while the corn is standing there, or when you come to take it out of the lot, more especially if you draw it off the ground before husking, as is often done here. And if you raise pumpkins, as you always should do among your corn, you will often wish to draw them off before you do the corn. Now the first great and all-important gain in this way of doing the work is time. It can be done in less time than any other way, with no waste to the crop, and if it be ever so green when set up in this way it will cure without mould or injury to either corn or fodder, as the shock is necessarily loose and open at the bottom to have it stand up well. Then if you wish to draw the shocks off the field or to barn or sheds to husk, your hills which hold up the shocks are on the outside and easily got at to cut them off, and without tearing the shocks to pieces, as when set around any hill, and the shocks themselves being made small have cured through, and are light and easy to load and unload. I have been one of two men to cut and shock an acre of heavy corn that would turn 120 baskets per acre in this way in six hours, and every shock was bound with at least two, and many



of them with three bands. And it stood the fierce southwest winds till December without getting down.

That is the greatest source of trouble and loss, the shocks fall over and get on the ground, and then the corn and fodder both rot and spoil, while this style of fastening it firmly to two hills of corn completely forestalls all that source of loss and perplexity and vexation. Now I do not propose to set myself up as a teacher, but have given you this, as in my estimation, a better mode of saving the corn than I have ever seen practiced in this county. If you will give it a trial you shall then judge of it for yourself. And if I shall have helped some one of my fellows in his labors I am satisfied.

JUNIOR.

Rochester, N. Y.

#### WHEAT ON SUMMER-FALLOW.

EDS. GENESEE FARMER: I wish to ask a question, which I hope you will answer in your next. In the August number you said that the wheat on your summer-fallow was not as good as on the barley stubble. I am in the same fix. I summer-fallowed twenty acres in 1864; began plowing it the 8th of June, and finished as soon as two good teams could do it; sod three years old; commenced plowing the second time on the 11th of August with two teams, and began plowing for seed the third time September 2d, and to seed the next day—all finished on the 10th. About one-third of the field, on the highest portions, was well manured with manure that had been piled up over a year and well-rotted. The manure was put on before plowing the last time, and the field well underdrained with tile. The kind of wheat sown was the Witter or Hope-well, which I have sown for six years past. The barley stubble was sown on the 26th and 28th of August without any manure. The barley stubble yielded at least one-fifth more per acre. The straw was bright and the kernel plump and heavy. On the summer-fallow the straw was heavy and badly rusted in places, and the wheat considerably shrunk-en, but no midge in either. And now the question. Did yours do similarly, or did the straw not grow as well on the summer-fallow, and at what time was yours sown?

You ask, is it not curious that red-root should spring up?" &c. Now, sir, it is not curious, for the red-root grows and seeds every year, as you can easily see if you examine closely about the first of June, and thus keeps the land foul.

JAMES. H. SIMMONS.

Canandaigua, N. Y., August, 1865.

The wheat on our summer-fallow was not as heavy in the straw as on the barley ground. It was *not* injured, as yours seems to have been, by being too rank—just the reverse. A little of your manure would have helped it.

#### BEET SUGAR IN THE WEST.

WE are surprised that the present high prices of sugar have not already induced our capitalists to introduce into the United States the manufacture of sugar from the beet; especially as the success of this manufacture is established beyond all peradventure in France, as well as Germany and Russia. It is no new thing, no pretended discovery, but a branch of manufacture which has attained such vast extension as not only to produce enough sugar for home consumption in those countries, but large quantities for export, especially in Germany.

The price of sugar in the United States will probably remain high. The tariff is not likely to be reduced, for the reason that the duty on foreign sugar produces a very large portion of the entire custom-house revenue. The cultivation of the sorghum may, in the course of time, become a matter of some importance for home manufacture, and may be made to supply the producer's family with sugar. But it is a question whether there will ever be a surplus from this source, which will tend to check the importation of sugar from foreign countries. The average quantity of sirup or sugar obtained from a well cultivated acre of sorghum is but small, when compared with the average product of beets, and we are yet to learn to what extent the manufacture of sugar from sorghum can be made profitable. Despite the high prices of sugars during the last four years—long since the introduction of sorghum—which have offered inducements for experimenting the manufacture from it on a large scale, there is still no proof of its being feasible; on the other hand the manufacture of sugar from the sugar beet has long since been a well established branch of industry in Germany, France and Russia, by which not only the projectors and stockholders have amassed princely fortunes, giving at the same time employment to thousands, but it has also contributed to keep the balance of trade in favor of those countries. It may yet render the same service to the United States.

To form an idea of the extent to which the manufacture of beet sugar has been carried in Germany, we will state that official statistics show 392 factories in the Zollverein and Austria to have manufactured in one season from 3,435,000 tons of beets, a quantity of sugar amounting to 583,000,000 of pounds. In Prussia proper, 221 factories consumed 1,700,000 tons of beets, from which 352,000,000 pounds of sugar were made. Most of the manufactories of Prussia, at least three-fourths of them, are located in a circuit of country of about the size of Cook and Will counties in this State, in which comparatively small territory there is now produced, annually, the immense quantity of 250,000,000 pounds of sugar, representing a value of upwards of \$30,000,000.



The soil in a large portion of Illinois is particularly well adapted to growing the sugar beet; in fact, is equal to the best in the sugar districts of Germany. Beets have been raised here—by way of experiment—as fine and as rich in saccharine matter as in the most flourishing fields in Europe. At the same time we are entirely dependent for our supply of sugar on the importations from Cuba, and on our own production in Louisiana. The latter source will probably yield in the future a very small proportion of our consumption, as there is no kind of work so severe on the negro as that on a sugar plantation. But shall we remain dependent on foreign countries for the production of an article of such prime necessity when there is no visible impediment to our producing all that we can consume within our own borders?

The advantages of the beet over all other vegetable growths, not excepting cane raised in tropical climates, for the manufacture of sugar, are the following:

1. The average product of sugar from a well cultivated acre, planted with beets, is larger than from any kind of cane in any part of the world. In Germany, crops of 40,000 pounds of beets, or 3,600 pounds of good sugar are often raised.

2. The cost and expenses of planting, working and harvesting an acre of beets are little more than the cost of work to be performed on any kind of sugar cane.

3. The sugar beets can and ought to be raised in a northern climate, and there is no surer crop. Entire failures of it are entirely unknown, as under the most adverse circumstances the product of an acre of beets will not fall short of two-thirds of an average crop. In times of a heavy drouth the quantity of beets will, as a matter of course, be less than in a favorable season; but they will then be richer in saccharine matter.

4. The beets can be preserved in a simple and easy manner by burying them in the ground until they are wanted. In this way the manufacturing season is extended to six or eight months, while it is confined in Louisiana to merely two or three months. The same amount of machinery will, therefore, in Illinois, turn out three times as much sugar as can be made from cane in Louisiana. Thus the amount of capital invested will be small in proportion to the quantity of sugar produced, as compared with what is required for manufacturing cane sugar.

5. The soil, after having raised two consecutive crops of wheat, will still produce double the amount of wheat it would have done before it was planted with those crops. The peculiar process of cultivation required to raise a crop of beets, causes the soil afterwards to produce more wheat, and owing to this

fact the value of the land is greatly enhanced by producing beets. The sugar from the beet is superior for refining purposes, as is proved by the excellent quality of German loaf sugar made from beets alone, which has never yet been equaled.

There are many other reasons why sugar beets should be preferred over all other products of the soil from which sugar is made. But above all, it must be remembered that the manufacture of beet sugar has advanced in Europe to such a state of perfection, and is a fact so well established, that nothing more is wanted here than men and enterprise, with a sufficient amount of capital to take hold of the business. It will surely become, in the course of a few years, one of the most extensive and profitable branches of industry in this country. If properly located, and rightly managed, there is no possibility of failure.

Some may contend that sugar can not be produced so cheap here as in Europe, owing to the difference in wages. This, however, will be counterbalanced by the lower price of land in Illinois, compared with its value in the sugar districts of Germany or France, where an acre of such land can not be bought for less than \$1,000. Besides, our great improvement in agricultural implements will enable us to produce in the United States, paying the highest prices of labor, a good quality of sugar at the rate of three cents and a half per pound, and pay a fair interest on the capital invested.—*Chicago Republican*.

We are glad that this subject of raising beet sugar is attracting attention in the West. There can not be a reasonable doubt that with anything approaching present prices sugar can be manufactured from beet roots with large profits.

We should like to see the matter fairly tested in this section. Our climate is very favorable for the growth of the beet, and we need some such crop for enriching the land. Everything points to success.

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HOW TO OBTAIN EGGS.—There is much in breed, in egg-laying qualities. But the most is in good treatment—making the hen at home. A crowded place will not do. Too many hens together is bad. Why? Because it interferes with tranquility. The points of success are: Warm quarters; roomy; clean; unmolested; plenty of food; a variety of feed, varied daily with animal food of some kind, it matters little what; water changed often; crushed bones, either burnt or otherwise; pulverized earth or spent ashes to wallow in; light; and as much cheerfulness as possible. Then select good breeds. The Spanish are among the best of layers, and are almost anywhere to be found. But remember the good treatment; or dispense with hens for profit.—*Coleman's Rural World*.



WOOL SHRINKAGE—MICHIGAN TEST.

WE present to our readers herewith the result of the test concerning the shrinkage of wool, afforded by the Farmers', Mechanics' and Stock Breeders' Association, of Jonesville, in the cleansing of ten Merino fleeces sheared at the sheep-shearing of the association in May last. In this test it may be safely said that the best fine-wools of the State were represented, as Hillsdale and the adjoining counties are ranked among the very best sheep districts in the West, and the sheep-shearing in question brought out what were supposed to be the very best specimens of the very best flocks in the section. The entries were made in competition for premiums offered for the "best cleansed fleeces," and from the facts in the case it is evident that the exhibitors acted in good faith, and that no fleeces were entered which in the opinion of the owner did not stand a fair chance of obtaining a premium, the owners not being aware, up to the time of this test, of the enormous shrinkage of fine wool in the operation of cleansing. Hence, the result of this test may be regarded as a fair exhibit of the average shrinkage of first-class Michigan fine wool. The association is entitled to the thanks of all interested in wool-growing for thus settling an interesting and highly important question by this practical test.

In presenting the table, as furnished us by the Secretary, Hon, W. J. Baxter, we will only premise that the fleeces were cleansed under the superintendence of Mr. L. D. Green, of the Jonesville Woolen Factory, who was chairman of the committee, the cleansing being carefully done in the usual manner of preparing wool for cloths, and that we believe the figures may be relied upon as correct:

No. of entry.	Fleece of ewe or buck.	Wt. of fleece		Loss per	
		uncleansed.	cleansed.	cent. in	cleans'g
		lbs. oz.	lbs. oz.	lbs. oz.	
A	ewe.	10 8	3 12½	6 14½	63.3
B	ewe.	12 0	4 10½	7 5½	61.1
C	ewe.	11 8	4 12½	6 11½	58.4
D	buck.	14 8	5 10½	8 13½	69.9
E	buck.	14 8	5 15½	8 8½	58.8
F	buck.	15 0	6 1½	8 14½	59.3
G	buck.	11 0	4 3½	6 12½	61.6
H	buck.	9 8	3 14½	5 9½	58.8
I	buck.	16 0	4 5½	11 10½	72.8
J	buck.	9 8	3 12½	5 11½	60.1

It is interesting to compare this table with that prepared by the committee of the New York Fair. Our Western wool-growers will learn with pleasure that the average per cent. of shrinkage is less, while the average weight of the scoured fleeces is greater, in the case of the Michigan fleeces, compared with the Merino fleeces cleansed in New York. It is but fair to state that none of the Western fleeces had so small a per cent. of shrinkage as the New York prize ewe, and that one of the fleeces cleansed at Jonesville showed a greater shrinkage than any one of the New York fleeces. For convenience we place these facts in a tabular form, viz:

	Michigan.	New York.
Least per cent. of shrinkage.....	58 .4	52
Greatest per cent. of shrinkage.....	72 .8	71 .4
Average.....	61 .5	62 .7
Average weight uncleansed fleeces....	12.40 lbs.	12.63 lbs
Average weight cleansed fleeces.....	4.70 lbs.	4.61 lbs

The Michigan fleeces have one and two-tenths per cent. in the shrinkage and nine-hundredths of a pound in the weight of the fleeces in their favor. Our Western wool-growers may well be proud of this result.

— The public will understand that the names of owners of the fleeces in the Jonesville test are withheld out of deference to their feelings. The fleeces were "brag" fleeces from "brag" sheep, and the shrinkage was so much greater than was expected that the owners felt a disappointment which it would be ungenerous to aggravate by a public exposure.— *Western Rural*, August 19.

A COMPLIMENT TO OUR WHEAT GROWERS.

MR. N. J. COLEMAN, of St. Louis, editor of the *Rural World*, was through this section a few months ago, and in an article on the Cultivation of Wheat alludes to what he saw as follows:

"Clean culture reminds us of what we saw the past season in traveling through the Genesee Valley. The culture of wheat there is carried on to perfection. Weeds are not seen—or have not been so far as our observation extended. It is a clean soil, clean culture, clean in appearance throughout. Nothing surpassed the beauty of these wheat fields. And so should it be here. It benefits there, and it will here.

"Drilling has been practiced in Genesee for many years—and is an established thing, superior in every respect to the old mode. In Ohio, and in most of the wheat-growing States, the advantage off drilling is understood—and the little rows, thick and clean, show the superiority over the old mode."

GRAND FARMING.—The *New York Post* notes a corn field of one hundred and sixty acres, on the grand prairie, in the plowing, planting and cultivation of which no man walked a step. A rotary spader, drawn by four horses, and driven by a man upon the box, plowed the field to a uniform depth of eight inches, and gave such thorough tilth that it was not necessary to use a harrow at all. A corn-planter, drawn by two horses, and driven by a man upon the box, next planted the seed. A cultivator drawn by two mules, one walking on each side of the knee-high corn, and driven by a man upon the box, completed the culture of a row at a single operation; and in the tool-house lay another machine, also to be drawn by horses, which will cut down the corn when it is ripe and lay it in regular rows, to be finally gathered by hand. But it is expected that by next year this machine will be so improved as to gather up the corn also.



## NOTES FOR THE MONTH—BY S. W.

## ROCKY MOUNTAIN CORN.

THIS is decidedly the largest and best variety of early corn for the table I have yet seen. The little Tuckett corn is not half as large, it is not so sweet, and nearly a week earlier. The earliest sweet corn is no sweeter, not as early by a week, and the ears are much smaller. I picked the Rocky Mountain for boiling on the 20th of July, and it is now 14th August, and all dead ripe, and the seed ears put in truss for early planting next spring. Ears 7 to 8 inches long, 8 round, kernels large, white and slightly dented.

## GRAPES.

By all accounts the grape crop, barring a little mildew on the crowded trellis, is to be very good in this State this season. I. Denil, one of our grape growers, has contracted all his Isabellas at 10 cents a lb. His sale will probably foot up fourteen or fifteen hundred dollars. H. Williams, who has 760 feet of grapes under glass at Buffalo, writes that he never before had so great a show of Black Hamburgs, and other exotic grapes in any one season before.

## TOMATOES.

It is a great mistake that tomatoes will ripen as early, being on the ground, or on a little brush, as they will when trained to a trellis, and the fruit is exposed to the sun. Too early trimming may violate nature's law, but lopping off late blossoms and thinning out the leaves hastens the ripening of the larger fruit.

## CUCUMBERS.

To get small cucumbers for pickling, cut off the ends of the main runners, and they will put out laterals, which will bear more, and smaller cucumbers.

## THE SEASON AND THE CROPS.

There never was a better season or better crops than we have had in Western New York this year. The most chronic croaker, as well as the sloven who affectionates Canada thistles, pigeon weed, and that eastern plague, the white daisy, find no cause of complaint against the weather this season. The heat has been great and continuous, but a gentle shower has come at the very time it was most needed, and without any excess. Heavier showers would have increased pasturage, but the now monstrous Indian corn crop might have been shortened, and potatoes might have been affected with the rot. 'Tis true that our apple crop is light and very poor, and peaches are naught, but pears promise pretty well, and grapes are luxuriant, and such a wheat crop some of our farmers boys never saw.

Waterloo, N. Y.

## GROWING TIMBER.

"I WANT to tell my story, which I know to be true and perfectly correct, as all the parties are to me well known and of unimpeachable veracity. The scene is in Berkshire county, Mass. A boy reaped wheat in a field—that boy grew to be a man, and lived to the ripe old age of 82 years. Before he died, he sat in his chair and saw a neighbor of his from day to day drawing saw logs to the mill. This man drew, had sawed, and sold 152,000 feet of lumber, and all from  $3\frac{1}{2}$  acres of ground upon which the old man when a boy had reaped wheat. The timber was mostly pine, some oak. I believe pine will grow as fast here as that."—HAWK-EYE, in *Country Gentleman*.

TRAINING CATTLE TO JUMP.—A Western farmer says he makes it a rule that whenever cattle are made to pass a fence, whether through bars or "slip-gap," to leave one rail for them to pass under. This gives them a downward tendency, and lessens their inclination to jump or look upwards, as they are sure to do when a lazy attendant throws down a part of the rails, and makes them vault the rest. Cattle may be learned to go over any fence, by the careful training they often get for this end, and performed as follows: First starve them, or give them poor feed, which will make them light and restless. As soon as they go over the lowest part of the fence after better provender, make them jump back again, and put on one more rail, saying, "I guess that will keep 'em out." Next day, (as of course they will be in mischief again,) repeat the process, adding another rail; in a short time they will take care of themselves, and harvest the crops without charge.—*Tucker's Rural Affairs*.

GRAIN that has been injured and become musty, may be restored to nearly its original sweetness by pouring boiling water over it, and permitting it to stand till cool. The scum which arises to the surface of the liquid during the process of purification should be carefully removed. Unless the gluten of the grain has become chemically affected—which is rarely found to be the case, except in very old grain—every trace of mustiness will be removed, and the grain rendered fit for use.—*N. E. Farmer*.

LOW PRICE OF CORN AT THE WEST.—It is said that—"Corn is selling at twenty cents a bushel at Bloomington, Ill."

We have several times, during the war, called attention to the fact that Western farmers derive more benefit from the high premium on gold than the Eastern farmers, and that as the premium fell prices would fall in the West much more than in the East.





## GARDEN WORK FOR SEPTEMBER.

I FIND, in circulating considerably among the farmers of Western New York, that the Horticultural Department is still too much neglected. The garden is too small, is too poorly cultivated, or has too few varieties, so that the tables of many farmers are entirely ignorant of many of the choicest delicacies that the soil and climate are capable of producing.

This should not be—but now that peace has returned to bless our much loved country, and the attention of our people is being turned to the improvement of the land we have saved—will not farmers resolve that the present shall mark the beginning of a new era in agriculture? That they will not only till their land more thoroughly, seek better varieties of grass, grain, vegetables and fruit—also improved breeds of domestic animals: but that they will decidedly improve in that department which, more than all others, tends to make home attractive?

And while urging the claims of the fruit and vegetable garden, I would also bespeak a conspicuous corner in door-yard or garden for the *flower garden*.

I presume that the female portion of most families, with a little aid and encouragement from the stronger sex, would cheerfully assume charge of the floral department.

The editor of the *Farmer* has conferred a benefit on the farming community in which he lives which they will *someday* acknowledge, by cultivating, in full view of the highway, a beautiful flower garden. If the farmers do not appreciate his improved methods of farming, I predict that their wives and daughters will admire his flower garden, and seek to emulate it.

September is a good time to commence a garden, to trench and underdrain it, if the soil is wet and compact—to dress it with manure—and to sow such vegetables as will endure the winter with such protection as is practicable.

*Beans*—Should be pulled as soon as ripe before they are weather beaten, exposed to the sun until dry, and then thrashed or shelled. Limas that have failed to ripen may be cooked, or dried for winter.

*Cabbage and Cauliflower*.—Fully matured heads

should be gathered and used, as they will be liable to burst open if left in the garden.

*Celery*.—Continue to earth up about once a fortnight.

*Cucumbers*.—If the vines have not been destroyed by bad management, they will produce pickles until frost.

*Onions*.—Potato Onions if set early this month will mature sometime earlier than if set in March. They should be about 15 inches by 6, and the bulbs just covered with earth. Black-seed sown last month should be nicely up, and receive a thorough cleaning.

*Potatoes*.—A singular blight has visited potatoes this season, entirely destroying the vines of large fields, just as the tubers had fairly commenced to grow. It is believed by many to have been caused by the hot, sultry, showery weather just after the middle of June.

*Spinach*—May be sown in the early part of the month. That sown last month will require hoeing.

*Squashes*.—Cut off, dry in the sun, and then pack away in a cool, dry place.

*Turnips*.—If sown broadcast will be too thick in patches, and should be cut out with the hoe or pulled by hand.

## SMALL FRUITS.

*Strawberries*.—It is hardly advisable to plant strawberries north of the latitude of New York city later than August, as they will not get deeply rooted, and may be hoven out by the frosts of winter. Those planted last month should be kept clean so that they may get as good a growth as possible.

*Grapes*.—Hartford Prolifics will ripen about the middle, but if left on the vines about two weeks after they turn black will be greatly improved in quality. So of other varieties; the longer they can hang on their vines without being injured by frost, or dropping from their stems the better they will be. When gathered, those to be preserved, should be handled carefully, all defective ones removed, and packed in a tight box with paper between each layer. The crop is greatly injured this season by mildew.

P. C. R.

GRAPES AND WILD LANDS IN KANSAS.—Mr. A. M. Barns, of Manhattan, Kansas, who has for some years paid considerable attention to the cultivation of the grape, and who claims to have the largest number of varieties of grapes in the United States, writes us that there is no locality in the Loyal States where the grape does as well as in Kansas.

He speaks very encouragingly of the future prospects of the State, especially in regard to grape culture. Any industrious young man with \$50 or \$100 could not do better than settle in that section. Government gives 80 acres of land to actual settlers, within 10 miles of the Pacific Railroad, and 160 acres if over 10 miles from the railroad.



## HORTICULTURE IN INDIANA.

WE are indebted to the Hon. J. D. G. NELSON, of Fort Wayne, Ind., for a copy of the Transactions of the Indiana Horticultural Society for 1865, of which he is President. We make a few extracts. In his excellent address before the Society, the President remarks:

## ERRORS OF THE PAST—HINTS FOR THE FUTURE.

"Indiana is a fine fruit-growing State, and, had this Society been organized twenty years ago, and the same interest taken in cultivating, planting and producing the best and most profitable varieties of fruits as is just now beginning to be taken, the revenue to the State from that source would be immense, besides the luxury of every person eating fruit "under his own vine and fig tree." But to arrive at success, the fruit-grower has many obstacles to encounter and many enemies to contend with. The season, the soil, the climate, insects in multitude, with an endless chain of minor drawbacks—all of which he has to meet and combat as best he can. But his great and powerful weapon is horticultural knowledge. Armed with that, he will march into the conflict with an almost positive assurance of success.

The apple being the great staple fruit crop for market, as well as for family use for the million, I pass over the other delicious fruits for the present, and will drop a few suggestions on this branch of the subject. Having been a fruit-grower to some considerable extent for the past twenty-five years, and having paid dearly and bitterly for *much* of the *little* horticultural learning I have, I propose giving a few brief practical hints that may be of some use to others.

My great and leading error, like most other beginners, was, in the great number of varieties and the want of selection of suitable sorts adapted to the soil and climate—a most fatal error, which added to the frequent blunders or impositions of nurserymen, who I am sorry to say, are not *always* more honest than other men, have given me endless trouble for the past twenty years, and attended with not a little expense. I have been grafting and re-grafting ever since my first orchard began to bear, until I converted nearly five hundred trees from probably half as many sorts into *six or eight* varieties, and am still engaged in grafting from twenty-five to fifty trees a year, and expect to continue the business, if I live, for years to come, and until the varieties in the main, are few in number, and those only of the most choice and profitable sorts.

For the benefit of others who have blundered into similar difficulty, and their numbers are legion, I will state, that my practice is to visit my orchards during the fruiting season, every day if possible, certain-

ly twice a week, provided with a pencil, memorandum book, lables, and small strips of white muslin in my pocket. I take notes from time to time and from year to year in regard to the growth, healthfulness and productiveness of the trees, quality of fruit, kind of soil, treatment, and any and all other particulars that it may be important to know, before determining what disposition to make of any variety. When I become convinced that a certain variety for any cause is not worthy or profitable, no matter how good a reputation it may have established elsewhere, I tie a strip of muslin on a limb conspicuously, and attach a lable with the name of the variety with which I wish it grafted written upon it, and when the grafters are at work, they see the signal and the work is soon done.

## AFTER-MANAGEMENT OF A GRAFTED APPLE ORCHARD.

Judging from the many inquiries I have received, and from the numerous grafted orchards I have seen, I am apt to think that the subject of after management of a grafted orchard is not well understood, and as the practice of grafting orchards is becoming more general, where the fruit from any cause becomes unsatisfactory, I will go on to say, that my custom is not to wait till the trees get large, but as soon as I get fruit from a variety for a sufficient length of time to become satisfied, I commence the work at once, and graft all of that variety, except a specimen tree or two—putting in two scions in each stock grafted. On or before the first of July I visit my grafted trees, and if both scions are growing, which will generally be the case, if the work is well done, I pull out the weakest one, or the one least needed in shaping the top of the tree, rub off all sprouts, (and there will be plenty,) and enough of the limbs to give plenty of room, light and air, so that the grafts may make a good healthy growth. This I continue through the season as time and opportunity offers, sometimes pinching the ends of the graft if growing too rapidly. The following year cut one half or more of all the old wood remaining—cut back the grafts if the growth is too great, which is rarely the case, and see that the tree is well balanced, especially not too heavy on the east side. If there have been any failures and more grafts are needed, put them in. If too many, cut them out and see that plenty of room, air and light is given again, through the growing season. The third year cut out all the balance of the old wood, and the job is finished except keeping the sprouts rubbed off, and sometimes stopping the grafts by pinching as before, to make them stocky. Trees thus managed make as fine an orchard as root grafted trees, and frequently much finer."

PEAR BLIGH.

A paper written by Dr. J. FKIRTLAND, of Ohio.



on the Pear Blight was read, in which it is claimed that the disease is caused by atmospheric fungus. Prof. SALISBURY has discovered the spores of the fungus in blighted trees.

#### YELLOW S IN PEACHES.

The Secretary gave an interesting account of a visit he had made to the peach orchards of New Jersey. We copy what he says about the yellows:

"It has been settled that trees of all ages are liable to this malady, though they are seldom attacked before the age of five or six years. The first indication in the tree is a tendency to produce suckers or water-sprouts, generally on but one main branch the first year. The fruit on this limb ripens several days in advance of the regular time, and before the rest of the same tree. The second year the disease spreads considerably in the tree, affecting it precisely like the first; and the third year nearly always suffices to 'finish' them entirely. That this disease is contagious there can be but little doubt, as it has always been observed that the trees immediately adjoining those infected are sure to show the incipient symptoms the first year thereafter. The cause, as well as remedy, still remains a mystery. Orchards have been known to fail entirely by the ninth year, while others closely contiguous have flourished almost intact to the age of eighteen or twenty years."

#### GREELEY FRUIT PREMIUMS.

THE premiums offered by the Hon. Horace Greeley consist of three prizes of one hundred dollars each, for the best bushel of apples, the best bushel of pears, and the best dish of grapes (not less than six pounds) of varieties best adapted to general cultivation.

The premium on grapes was awarded last fall to the Ion, but from the shortness of the notice, Dr. Grant declined to receive the award, and asked that the premium be thrown open and decided in the fall of 1865.

The following varieties of apples and pears were exhibited and examined last fall and will not come into competition this year, except from the parties who exhibited the specimens then, viz:

APPLES. — Hubbardston, Nonsuch, Fallawater, Conkling's Seedling, Swaar and Baldwin.

PEARS. — Bartlett, Lawrence, Duchesse de Angouleme and Dans Hovey.

The fruit for which the premiums are offered must be exhibited at the 36th Annual Fair of the American Institute, to be held in the large Armory in Fourteenth Street west of Sixth Avenue. The apples and pears must be exhibited in baskets, barrels or boxes containing one bushel each, and must be placed on the table on or before Monday, the 18th of September. Varieties which ripen at a later pe-

riod may be exhibited at the rooms of the American Institute on the second Tuesday of November, and the second Tuesday of December, in competition for the same premiums.

The following gentlemen, well known to the Horticultural community, have been appointed a committee to examine and report upon the varieties exhibited: — Messrs. John A. Warder, Cincinnati, Ohio; Chas. Downing, Newburgh, N. Y.; Isaac M. Ward, Newark, N. J.; Wm. S. Carpenter, New York; P. T. Quinn, Newark, N. J.; Wm. L. Ferris, Throg's Neck, N. Y.; E. Ware Sylvester, Lyons, N. Y.

Mr. Peter B. Mead will meet with this committee in awarding the premium on the grape.

The fruit for these premiums should be directed to John W. Chambers, Clerk of the American Institute, Fourteenth street, New York, and marked "For the Greeley Premiums." The charges must be paid to the place of exhibition.

#### NEGLECT OF VEGETABLE GROWING.

THE *Magazine of Horticulture* has an article on this subject, quoting largely from the *London Gardeners' Chronicle*. There is no doubt but that an attempt to improve vegetables is looked upon as quite beneath the dignity of a scientific horticulturalist, and that professional gardeners leave the out-door kitchen garden department to their subordinates; but as the *Magazine of Horticulture* well says:

"Do the mass of cultivators, not gardeners, in the meaning of the word, but those who possess a quarter or half or whole acre, and make cultivation a pastime, consider at all the necessity of thought in the supply and culture of superior vegetables? Are they familiar with the best varieties, and the superiority of some kinds over others? We fear not, and the evil exists because the idea exists that anybody can cultivate a vegetable garden. Until this idea is reversed improvement must be necessarily slow. 'How is it,' we often hear asked, 'that they raise such fine celery as we see in the market?' or, 'how can I get radishes, long, clean, and free from worms?' If there was no skill in these things, these questions would not be asked, for all would have an abundance of the best. But there is a real difference in vegetables, apparent to the most ignorant, and hence there must be skill somewhere. We may therefore consider that question at rest,—that to grow superior vegetables, supply them in abundance, in succession, in season and out of season, and at the least outlay of labor and manure, is in reality an accomplishment not easy, and one requiring forethought, industry, energy, and practical skill."

Our Government has attempted to assist in this by introducing new varieties and sending out seeds with great liberality, but like most *Government* efforts of the kind it has proved a comparative failure. There is not interest enough felt in the country at large in the matter. The general idea is that a potato is a potato, a beet a beet, and that one is no better than another. Fully as great a mistake as to say that a native apple is equal for the table to a



Northern Spy, or that the old fashioned choke pear is as good as a Virgalieu. Now is the time to test almost all the principal varieties of vegetables, and to find out which are the best, and whether any new kinds have been cultivated in your neighborhood. If the County and State Fairs made their vegetable department more prominent, and did not give prizes merely for sizes, we might hope that these societies would be the medium of great improvement and so benefit the country by increasing the production, improving the quality and lowering the price of vegetables which form such a large proportion of the daily food of the nation.

#### APPLE TREES IN THE WEST—HEADING LOW.

THE *Rural World* says: "A few days since we passed an orchard of young apple trees, where the heads had been caused to start six or seven feet from the ground. The trees had evidently been planted four or five years. A few of the trees had withstood the effects of the sun on the bodies and were growing well, but at least two-thirds of them had been killed outright. When will tree planters learn that in this climate, trees must be permitted to branch low? They will do so if allowed to have their way. But the ruthless hand of the planter with his sharp knife will cut away every branch within reach. The sun in February and March shines upon the body of the tree, warms it, sets the sap in circulation and a freeze ensues the following night, congealing the sap, rupturing the sap vessels, and death sooner or later follows. The bark becomes black and the wood rotten. Those who have their apple trees pruned high, if they will look on the southwest side of their trees, will find what we have stated is true. The only way to save trees with high heads is to put plank on the south side, or wrap them with sacks or some other material. This will protect them from the sun. The branches when allowed to grow low will shade and protect the bole of the tree. The bodies of all trees, whether with high or low heads, are benefitted by being wrapped with some material, not tight enough however to bind the bark.

Good orchards can not be had without care and skill any more than good crops without good cultivation, and the sooner tree planters learn this the better it will be for their interests.

#### "FIELD AND GARDEN VEGETABLES OF AMERICA."

The appearance of such a work as this is a pleasant indication of an increasing interest in the culture of garden vegetables. Within the last twenty-five years rapid advancement has been made in the introduction of improved varieties of fruits, but we

have thought that the kitchen garden has been too generally neglected. How scantily are our tables, especially in the country, supplied with vegetables: How few farmers grow asparagus, or cauliflowers, or salsify, or celery. Even good varieties of peas are not abundant, and tomatoes are by no means common. Beets and beans are more general, but of what poor varieties! And so of melons, and a score of other plants which can be easily raised. It is a disgrace to our intelligence and a positive loss in health and happiness that so little attention is given to the cultivation of the best varieties of culinary vegetables.

This book is one that has long been needed. It has been prepared with great care, and will prove invaluable to every gardener. It will occupy the same position in vegetable gardening as Downing's *Fruit and Fruit Trees* does in pomology.

#### THINNING FRUIT.

Few owners of fruit trees will be apt to consider any advice under this head as applicable the present season, the crop being mostly a very light one. There are some trees, however, on which the fruit might be thinned to much advantage. Many trees are allowed to bear in ordinary seasons, from four to six times as many specimens as accords with their full and perfect development. The fruit is consequently small and deficient in flavor. This is the very year to learn a lesson on the subject. If the trees bear but few specimens comparatively, take off all the scabby, wormy and defective ones, which will be of no value in any event, and the crop which is left, having plenty of room, will show a size, beauty and perfection that can not fail to convince cultivators of the advantage of thinning. We have heard a skilful orchardist assert that by taking off two-thirds of his peaches, the remainder increased so much in size as to give the same number of bushels us without thinning, while their improved appearance and quality enabled him to realize triple the price.

It is an easy task to thin out the fruit of an orchard, and is a positive saving of labor—inasmuch as it is easier to remove the fruit when it is small, and requires no care in picking and handling, than to do it when the specimens become full-sized at maturity. For example, if a tree bears at first three thousand specimens, it is easier to take off two thousand when they may all be thrown into a single basket, than to pick this same two thousand afterwards with all the care required in careful handling to prevent bruising. One great advantage in gathering large, fine specimens, over small and imperfect ones, is the greater rapidity with which they may be taken from the tree.—*Country Gentleman*.



## Young People's Page.

### THE LITTLE DOVES.

[From "Carols, Hymns and Songs," by Rev. J. H. Hopkins, Jr.]

High on the top of an old pine tree,  
Broods a mother dove with her young ones three;  
Warm over them is her soft downy breast,  
And they sing so sweetly in their nest:  
"Coo," say the little ones, "Coo," says she,  
All in their nest in the old pine tree.

Soundly they sleep through the moonshiny night,  
Each young one cover'd and tuck'd in tight;  
Morn wakes them up with the first blush of light,  
And they sing to each other with all their might—  
"Coo," say the little ones, "Coo," says she,  
All in their nest in the old pine tree.

When in the nest they are all left alone,  
While their mother far for their dinner has flown,  
Quiet and gently they all remain,  
Till their mother they see come home again:  
Then "Coo," say the little ones, "Coo," says she,  
All in their nest in the old pine tree.

When they are fed by their tender mother,  
One never will push nor crowd another;  
Each opens widely his own little bill,  
And he patiently waits, and gets his fill:  
Then "Coo," says the little ones, "Coo," says she,  
All in their nest in the old pine tree.

Wisely the mother begins, by and by,  
To make her young ones learn to fly;  
Just for a little way over the brink,  
Then back to the nest as quick as wink:  
And "Coo," say the little ones, "Coo," says she,  
All in their nest in the old pine tree.

Fast grow the young ones, day and night,  
Till their wings are plumed for a longer flight;  
Till unto them at the last draws nigh  
The time when they all must say good bye:  
Then "Coo," say the little ones, "Coo," says she,  
And away they fly from the old pine tree.

### TALK WITH THE YOUNG FOLKS.

WRITTEN FOR THE GENESEE FARMER BY C. N. BEMENT.

WE propose, Mr. Editor, to have a little monthly chat with the young folks, in which we shall talk to them about every thing we deem important and useful. We believe in children, and believe in treating them well, and teaching them every thing they ought to know. We do not believe in scolding and fretting at them for what we have never taught them. This would be a dull world without children and young folks. They are the sunshine of life. They keep us all fresh and frolicsome. We don't want to associate with the man who don't like to play with children. We do not fancy bad children—such as swearing boys and pouting girls. We do not fancy dirty-faced, crying, snarling, fighting, cheating, lying children, who can't be trusted and are disobedient and tricky. Deliver us from such; but give us the clean, laughing faces, whose eyes are as pleasant as the merry stars; whose tongues love to speak good words, whose hands are ever ready to do the right things, and whose hearts are always loving somebody. We hope to have a troop of such little folks around us. We hope, and shall try to mix up a pleasant dish of good things for the little folks every month, and hope and trust they will take hold with a hearty relish and read every word we write.

### READING.

This is a reading age and full of all kinds of books and papers. Everybody has a paper, even to the children. The news all goes into print, and the people read it and then talk about it. All the jokes, puns, fun, pleasant stories and good lessons are printed, and so become public property. The best of things get into papers, magazines and books. Men's best thoughts and feelings, their cutest, funniest, loveliest ideas are spread on paper. So by reading we get the best of every thing—the cream of news and knowledge. How much young people lose, then, that can not read. Reading is talking on paper, and everybody who has a tongue and loves to talk should love to read.

### MANNERS.

Young folks should be mannerly. But how to be is the question. Many a good boy and girl feel that they can not behave to suit themselves in the presence of company. They are awkward, clownish, rough. They feel timid, bashful and self-distrustful the moment they are addressed by a stranger, or appear in company. There is but one way to get over this feeling and acquire graceful and easy manners, and that is to do the best they can all the time at home as well as abroad. Good manners are not learned so much as acquired as a habit. They grow upon us by use. We must be courteous, agreeable, civil, kind, gentlemanly and womanly at home, and then it will soon become a kind of second nature to be so everywhere. A coarse, rough manner at home, begets a habit of roughness, which we can not lay off if we try when we go among strangers. The most agreeable we have ever known in company are those that are perfectly agreeable at home. Home is the school for all the best things.

### THE GIRLS.

Everybody likes the girls if they are only good, and few like them if they are not good. But what is a good girl? Is it one that is contented to sit all day about the house and do nothing; that will let the books and papers lay all day on the table and not read one of them; that seeks not to know anything valuable or do anything useful, whose only use is to consume victuals and wear out dry goods? Is such an one a good girl? Certainly not. She only is good who does good. Girls have something to do as well as boys. They are something more than dolls—more than babies. They have much to learn and do to be good and useful. They have minds to educate every whit as good and strong as the boys; they have hearts to cultivate, as brave and noble as they are tender and loving; they have hands to teach all useful labors and consciences to train in the way of duty. They have characters to form, opinions to make up, positions to fill, avocations to pursue, duties to prepare for every thing that is great and good to do. Doing these things makes them good. Such girls are of inestimable value to themselves, their families and the world.

First think; and if thy thoughts approve thy will,  
Then speak; and after that thou speak'st, fulfill.  
Defend the truth; for that who will not die,  
A coward is, and gives himself the lie.



## Ladies' Department.

### HOUSE-WORK.

OF all the curious kinds of work, house-work will win the prize. Take your eyes off of it two minutes, and it goes to destruction. Keep them on all the time and you can not get on any more than a horse in a mill. It is circular work. It always begins in the middle and leaves off exactly where it begun. How the same dust, apparently, that you swept off the room is burnt in the stove, carried up chimney, dropped through the roof and deposited again in very nearly the same places on the floor is the queen of mysteries. A hundred little things are holding up their hands crying "Me next!" Of course you can't neglect them, but where they vanish as soon as finished is another wonder. Plainly visible and importunate as they were before, now the best microscope and ear-trumpet can't discover them. A call of something to do comes from parlor and kitchen and chambers, and sometimes the attics join in the chorus. If a person wishes to be convinced that she really does a great deal, for one week let her not do a thing; let her leave the sweeping and dusting, the wiping of dishes, cooking of food and making of beds—then by the edifice in ruins, judge of that which is weekly built. If one could put in the keystone of the arch on Saturday night it would be a great satisfaction, but generally by that time walls begin to crack, the doors to swell, and the floors to warp, and immediately the building needs repairs.

It may be questioned if there is more monotony in house-work than in any other labor. Monotony is a great law of nature. It is always accompanied by variety, and the two opposites never disagree. They were married at the birth of the earth. All great and important operations are monotonous, while smaller and more trifling ones have variety. Every year seeds germinate and leaves unfold in the same way, but every leaf and every seed is different. Like the centrifugal and centripetal forces, monotony and variety, though opposite in character, combine to produce the same result. The first, like a strong, dark under-current, has its august power made more apparent by the feathery, harmless foam on the surface. The house-maid may be cheered by knowing that the scrubbing of a floor or washing a garment, if measured by its monotony, is as important as the law of gravitation or any known laws in the planetary system. The amount of time that house-work consumes is another marvel. It does not take but three seconds to do this, three minutes to do that, five minutes and a half to do the other thing. So, taking a general view and speaking highly figuratively, we say it don't take any time at all, while experience proves that minutes have a marvelous way of increasing to hours, hours to days, and days to weeks.

House-work in some families lasts from lark-rising to bat-flying. Invention and Improvement are running a race with Time. Labor-saving inventions have clipped his wings, put clogs on his wheels, and set up way-stations where he must let off steam. Clothes-

wringers, carpet-sweepers, apple-parers, and other similar contrivances, talk eloquently of change, recreation, leisure and repose. They have taken pity on tired frames, aching backs and bleeding fingers. They are planting, watering, decking with flowers, clothing with verdure, to make an oasis. Seeming to be only paring apples or washing clothes, they are really unlocking the bookcase, opening the books, swinging wide the doors, stopping the cars for those who now have to go into the country. The whirling wheels mean more than puddings and pies and spotless linen. Fancy sees the odd little apple-parer and mouse-trap of a carpet-sweeper transferred into easy chairs, yielding couches or open desks; fragrant flowers, carpeted fields rejoicing in rain-refreshed air, and offering chances for literature and the life of tastes smothered beneath frying-pans and gridirons.

Early rising and system are essential to good house-work. System is more comprehensive than order. The first attends to things in general, the latter to those in particular. System has long arms; order, minute fingers. When order and neatness go crazy, house-work becomes a very laborious and painful affair. Constant putting of things in place, excessive scrubbing, cleaning and dusting makes up-hill travel of what might be a down-grade, swift and easy, or a pleasant ride on an even plain. When house-work is an all-predominant thing, its sway is despotic; chairs are nailed to the floor, and everything imploringly says: "Look at me, but don't touch me." Sweeping, dusting, cooking, &c., are very needful and good exercise. An early start and off-hand tack will keep it such and no more, will have systematic division, produce an appearance of graceful and not prim order, and leave enough dust for the sunshine to illumine.

### DOMESTIC RECEIPTS.

Contributed to the Genesee Farmer.

**VELVET CREAM.**—One-half ounce of gelatine, one and a half cups of wine juice and rind of one lemon, three-quarters of a pound of loaf sugar. Simmer all together until thoroughly dissolved; then strain; when cool add a pint and a half of cream; stir until quite cold; put it in a mold, set it in cool place, and it will become as stiff as blanc mange.

**SALLY LUNN.**—Three pints of flour, three teaspoonfuls of cream-tartar, one and a half teaspoonful of soda, butter the size of two eggs, one cup of sugar, a little salt—(mix all together except the soda)—four eggs, and a pint and a half of milk. Dissolve the soda in the milk. Bake in a loaf like cake.

**BLACKBERRY SIRUP.**—Boil four quarts of blackberries with one pint of water. Strain them, and add one nutmeg, one-half ounce of allspice, and one pound of loaf sugar. Boil again, and when cool add three gills of brandy.

**DELICATE PUDDING.**—Whites of three eggs, one-half pound of sugar, one-half pound of flour, one pint of cream. Bake fifteen minutes.



## Miscellaneous.

### A CONTENTED FARMER.

ONCE upon a time, Frederick, King of Prussia, surnamed "Old Fritz," took a ride, and espied an old farmer plowing his acre by the wayside, cheerfully singing his melody.

"You must be well off, old man," said the King. "Does this acre belong to you on which you so industriously labor?"

"No, sir," replied the farmer, who knew not it was the King. "I am not so rich as that; I plow for wages."

"How much do you get a day?" asked the King.

"Eight groschen," (about twenty cents,) said the farmer.

"This is not much," replied the King. "Can you get along with this?"

"Get along and have something left."

"How is that?"

The farmer smiled and said: "Well, if I must tell you—two groschen are for myself and wife; with two I pay my old debts; two I lend away, and two I give away for the Lord's sake."

"This is a mystery which I can not solve," said the King.

"Then I will solve it for you," said the farmer. "I have two old parents at home who kept me when I was weak and needed help, and now that they are weak and need help I keep them. This is my debt toward which I pay two groschen a day. The third pair of groschen which I lend away I spend for my children, that they may receive Christian instruction. This will come handy to me and my wife when we get old. With the last two groschen I maintain two sisters whom I could not be compelled to keep. This is what I give for the Lord's sake."

The King, apparently well pleased with the answer, said: "Bravely spoken, old man. Now I will also give you something to guess. Have you ever seen me before?"

"Never," said the farmer.

"In less than five minutes you shall see me fifty times, and carry in your pocket fifty of my likenesses."

"This is a mystery which I can not unravel," said the farmer.

"Then I will solve it for you," said the King. Thrusting his hand into his pocket and counting him fifty brand-new gold pieces into his hand, stamped with his royal likeness, he said to the astonished farmer, who knew not what was coming: "The coin is genuine, for it also comes from our Lord God, and I am his paymaster. I bid you adieu."

THE LANGUAGE OF FLOWERS AND FRUITS.—The lilac in April—"Give me leave." The rose in June—"Well, I'm blowed." The asparagus in July—"Cut and come again." Peas in August—"Shell out." The apple tree in September—"Go it, my pippins." The cabbage in December—"My heart's my own."

### ON THE THEA THORE.

BY ONE WHO IS THROUBLED WITH A THILIGHT LITHP.

Thweetly murmurth the breathe from the thea,  
Thoothing my thoul to thlumberth;  
And on itth waveth come sceneth to me,  
Of the Patht, in endleth numberth.

I thigh ath I think how yearth have sped—  
How joy hath left me to thorrow;  
My heart now thleepeth the thleep of the dead;  
But it waketh to gladneth to-morrow.

Now dantheth the thpray on the crethting waveth,  
Beneath the thun's rayth it glitterth,  
Thuth my thoul, when no longer thorrow enthlaves,  
'Neath Hope 'th thun in happineth flitterth.

Tho thing to me thweetly, breathe from the thea,  
That Hope may be ever bethide me;  
That dethpair ne'er thall thackle the free,  
Nor evilth thall ever betide me!

OBEYING ORDERS.—A certain General of the United States Army, supposing his favorite horse dead, ordered an Irishman to go and skin him.

"What, is 'Silver-tail' dead?" asked Pat.

"What is that to you?" replied the officer. "Do as I bid you, and ask no questions."

Pat went about his business, and in an hour or two returned.

"Well, Pat, where have you been to all this time?" asked the General.

"Skinning the horse, your honor."

"Does it take nearly two hours to perform such an operation?"

"No, yer honor; but thin you see it tuck about half an hour to catch him."

"Catch him? fire and furies! was he alive?"

"Yes, yer honor; and you know I couldnt skin him alive."

"Skin him alive! did you kill him?"

"To be sure I did; you know I must obey orders without asking any questions."

SOUTHERN POOR WHITE FOLK.—About seven miles from Richmond I saw a man lying under the shade of a tree, assiduously chewing tobacco. After saluting him, and after several questions, to which I received lazy yeses and noes, I asked him to what churches the people in that neighborhood usually went: "Well, not much to any." "What are their religious views?" "Well, not much of any." "Well, my friend, what are *your* religious views?" I asked. The man answered slowly and sleepily, "My own 'pinion is, that them as made me 'll take care of me."

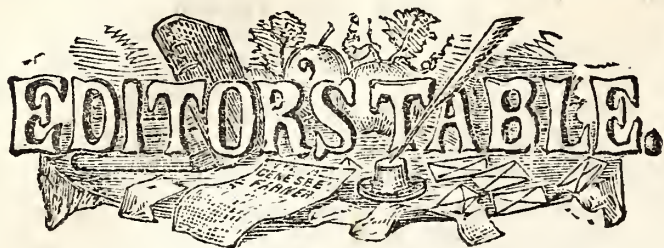
WHY is a man who has just carried his carpet bag on shore from a steamboat like the owner of the soil? Because he is possessed of landed property.

A LADY had a duck which, on hearing that it was to be killed for dinner, walked into the garden and deliberately stuffed itself with sage and onions.

A PRIVATE banker is every man who can lay his hand on his pocket, and speak of his cash-*here*.

A bird that always faces the storm.—The weather-cock.





## THE GENESEE FARMER FOR 1866.

### THREE MONTHS FOR NOTHING!

As we have before said, we intend to make several improvements in the FARMER for 1866—better paper, better printing, and more matter. The price will be the same as this year. It can not be afforded for less than one dollar a year to single subscribers, and eighty cents in clubs of five and upwards. We have received many assurances from our readers, far and near, that our “Walks and Talks on the Farm” and our “Market Reports” are alone worth more than the paper costs. These will be continued, (should our lives and health be spared,) and we hope that our friends will make an earnest effort to increase our circulation in their respective neighborhoods. The present is a good time to commence. At the different Fairs our readers will see many of their acquaintances who do not take the GENESEE FARMER. Will they not say a good word for it, and offer to take subscriptions? For one dollar we will send the GENESEE FARMER to all new subscribers for October, November and December of this year and the whole volume for 1866! We shall in a short time offer a liberal list of premiums to those who get up clubs, and all that are sent in on the above offer will be counted in making up the awards.

We have not space to say more on this subject—neither is it necessary. Let all who feel an interest in the GENESEE FARMER take a copy with them to the Fairs and see what can be done to increase our circulation. Recollect that every additional name counts.

### How to Alter a Country House.

THE article on this subject in the last number of the *Farmer*, page 237, should have been credited to the *Horticulturist*. It is one of a series of highly interesting and instructive papers written for the *Horticulturist* by the author of *My Farm at Edgewood*, and we are sorry that by an oversight due credit was not given at the time. The publishers of the *Horticulturist* deserve commendation for their enterprise in securing such able contributors.

### American Mowing Machines in England.

At the recent trial of implements and machines at the Fair of the Royal Agricultural Society of England, held at Plymouth, Walter A. Wood, of Hoosick Falls, N. Y., received the first prize for mowing machines; the first prize for reapers, and the second prize for combined machines. This is certainly glory enough for one year.

### The Markets.

SINCE our last report prices of all kinds of agricultural produce have advanced very decidedly. The wheat crop throughout large portions of the West was seriously injured by insects, rust, drouth, &c., so that even had harvest weather proved propitious the yield would have been much below the average. But large sections in the Western States have been visited with unusual rains, which have destroyed much grain and seriously damaged the whole crop. It seems to be admitted that there is comparatively little first-quality wheat in the West. An Eastern gentleman, who has recently made a tour through the West, writes to the *Country Gentleman* from St. Louis, under date of August 14, as follows:

“Through the major part of Ohio, Indiana and Illinois, I found an excessively wet season, with prevailing rains for the past six weeks. The country seems almost deluged with water, and vast areas of the level and prairie lands of these States present the appearance of immense swamps. The sky is dark, rain constantly falling, and only two or three days of sunshine have gladdened the spirits of Western men in many weeks. Not one-fifth of the wheat and oats have been threshed or stacked. That which is stacked in many cases stands in water a foot deep, and is rotting throughout; that in shock is grown, and the straw discolored.”

This, it will be observed, was written August 14th. We have just received from Washington the report of the Commissioner of Agriculture for August. The Commissioner has a system of estimating the yield of the crops, based on reports from correspondents in all sections of the loyal States. The reports of his correspondents are up to August 1st. From these reports he estimates that the crop of wheat this year will be 134,454,125 bushels, while the crop of 1864 was 160,695,823 bushels—showing a deficiency of 26,241,698 bushels.

Now even admitting that the crop has not suffered since these reports were made, the prospects of our being able to export much wheat are not very bright.

Our exports of wheat and flour from New York to Great Britain and the Continent from the 1st of September, 1864, to the week ending August 23, 1865, were 136,666 barrels of flour and 374,526 quarters of wheat; or reckoning a barrel of flour equal to five bushels of wheat, our total exports of wheat to Europe have been less than three and a half million bushels. Now if it is true that our crop of wheat last year was over one hundred and sixty millions, and that out of this we have been able to spare only three and a half millions, how much shall we have to spare out of a crop estimated at only one hundred and thirty-four millions?

If the deficiency is as great as is here estimated, we shall not only have no wheat to export, but shall need to import over twenty million bushels to give us as much wheat as we had last year. We say nothing of the probable demand for flour from the Southern States, which will still further increase the deficiency of the supply.

No wonder, therefore, that within the past two or three weeks the grain market has been excited, and that prices have advanced *fifty cents a bushel*! In this section Eastern buyers are picking up wheat in all the



country towns, and paying from \$1.85 to \$2.00 a bushel for red and amber. We saw a load of amber wheat sold in this city to-day (August 28) for \$2.03. We also saw another load of amber wheat for which \$2.25 was asked! We do not know whether he got it or not, but buyers were quite excited and bid against each other very freely. We should not be surprised if the price should go up to \$2.25 before this reaches our readers.

We are inclined to think it a good time to sell. We advised the readers of the *Genesee Farmer* last month not "to be in too big a hurry to sell," and those who acted on the advice have made money by it. We anticipated a rise, but it has come sooner than we expected, and there may be a slight reaction. But if the facts given above are to be relied upon, it would seem impossible for wheat to fall permanently. It is generally best, however, to sell when you can get a good price.

Only \$1.10 a bushel is offered in this city for barley. This is relatively a lower price than either wheat or corn, and it is therefore likely to advance somewhat.

Oats bring from 45 to 47 cents, and Canada peas sell from \$1.20 to \$1.25. Beans are not in market, and the price is nominally only \$1.00 per bushel. We can not but think that they will be considerably higher than this. Potatoes have advanced. They are worth from 60 to 70 cents. Onions are low this season. We hear of contracts made at 62½ cents per bushel. Timothy hay, \$12@16 per ton. Fine mill-feed, \$15@16 per ton. Fall apples, \$1.00 per bushel. Contracts for winter apples have been made at as high as \$4.25 per barrel. Corn, 90c. Wool quiet at 58@60c.

Beef cattle still maintain their price. We hear of some extra fat cattle being sold in this section for 8c. a lb. live weight. The price in Albany this week ranges from 4¼ to 9¼c. per lb. live weight, and 10c. for "premium cattle." Prices advanced this week 25c. a cwt.

Sheep are lower than for sometime past. Good fat sheep bring from 6 to 7c. a lb. live weight in Albany, and lambs 7 to 8c.

Hogs in Albany bring from 11¼ to 12½c. per lb. live weight. The demand for store hogs throughout the country is very brisk.

*Later.*—Another steamer is just in from England. The weather had been wet and retarding the harvest. Wheat has advanced materially, though on the day the steamer sailed the weather had brightened up a little and the market drooped accordingly!

Gold is 144, with an upward tendency.

### Wheat in Indiana.

A correspondent at Coesse, Ind., writes us under date of August 22, that "the wheat crop in that section is a failure. Many fields were not cut at all." He thinks they will have wheat there at \$2 per bushel before December. We have accounts from other sections of the West equally unfavorable.

SOME one says: Timothy for muscle, clover for milk, and corn for fat.

### Literary Notices.

**HOURS AT HOME.** A Popular Monthly, devoted to Religious and Useful Literature. Edited by J. M. SHERWOOD. August. New York: CHARLES SCRIBNER & Co.

This periodical has entered upon its career with every prospect of success. Its title is an excellent description of its contents. The tone of the magazine is Christian, but the articles are not exclusively upon religious subjects. One feature in all the numbers which have yet appeared which we think peculiarly worthy of notice, is the stories of the sufferings and persecutions of the early Scotch and German Protestants. The youth of our land can not learn to respect too much those excellent people—the Lollards, the Hussites, and the Waldenses—who "wandered in deserts and in mountains, in dens and caves of the earth," and suffered all afflictions with wonderful heroism and with exalted faith.

The Literary articles are of great merit and interest. This is really a family magazine, and one that we can heartily recommend to our readers.

**CONVERSION OF THE ROMAN EMPIRE.** The Boyle Lectures for the year 1864. By CHARLES MERIVALE, D. D. New York: D. APPLETON & Co.

This new publication is a most valuable series of lectures on a most interesting but much neglected period of history. The subject is treated with great originality, and so clearly that the most general reader will be interested. The style is pure and elegant, and gives a grace to the driest argument. Any one who will commence the book will not lay it down unread. The notes in the appendix are very valuable.

**CONSPIRACY TRIAL.** Vol. I. Boston: J. E. TILTON & Co.

This volume contains an exceedingly minute report of this trial, which will become a marked event in history. The publishers sent a copy of this work, and of the "Sermons on the Death of Abraham Lincoln," which we recently noticed, to John Bright, M. P., and have received in return a very complimentary letter.

**COMPANION POETS FOR THE PEOPLE.** National Lyrics. By JOHN G. WHITTIER. Boston: TICKNOR & FIELDS.

This series of publications at the low price of fifty cents each is one of the most praiseworthy enterprises of this distinguished firm. The present is the third number in the series. There are to be six in all; but none will interest Americans more than this. The illustrations are beautiful, and the paper and print equal to the most expensive editions of the poets' works from which these songs are selected. Cheap and trashy literature have ceased to be synonymous terms, but this series of books is a step in advance of anything that has yet been done by American publishers to make the best authors accessible to all.

**MERRY'S MUSEUM.** New York: J. N. STEARNS.

This old established magazine for children is still as entertaining as ever, and as welcome to all families. The stories are excellent, the puzzles and charades well selected, and the "Merry Correspondence" seems to be kept up with great spirit.

**WOODWARD'S GRAPERIES, &c.** New York: GEORGE E. & F. W. WOODWARD.

This little work gives directions for erecting and heating various horticultural buildings. It contains twenty different designs, from a simple propagating house to an elaborate range of conservatories, green-houses, forcing pits, hot and cold graperies, mushroom beds, &c. Most of the designs are tasteful in form and convenient in arrangement.

**THE LITTLE CORPORAL.** Chicago, Ill.: ALFRED L. SEWELL. No. 2. August, 1865.

Another paper for the children. We old people can not monopolize all the brain and enterprise among authors and publishers for our own amusement. The little folks are having their share. Mr. Sewell has in the two numbers already published pledged himself to do great things for the children, both for their



instruction and amusement, and we have no doubt but that he will fulfil his promise. The articles are full of life—the paper and printing beautiful. A finely-engraved portrait of President Lincoln and his favorite child is given to each subscriber. Nothing could please children more than this picture.

#### New Advertisements.

LAST year Mr. H. G. Parish, who has charge of the printing department of the *Genesee Farmer*, published a paper each morning during the four days of the State Fair, held in this city. He proposes to do the same thing again this year during the Fair at Utica. We have no interest in the matter, but bespeak a good word for him from our advertising patrons. See his advertisement in this number of the *Farmer*.

The Nurserymen occupy a considerable space in our advertising columns this month—and they are ever welcome, for assuredly no class of producers are entitled to more credit. Ellwanger & Barry of this city are too well known to need any commendations from us. They have probably the largest nurseries in the world, and have done more than any other firm to make Rochester the head-quarters of the nursery interest in the United States. Rochester is called the "Flour City," and its extensive flouring mills warrant the name, but it is beginning to be understood that Rochester owes more to its nurseries than to its Flour Mills. The latter absorbs a large amount of capital and creates but little, while the nursery business brings in a semi-annual supply of money from all sections of the United States and the British Provinces, and employs it in the production of the choicest fruits and flowers.

Frost & Co., of the justly celebrated "Genesee Valley Nurseries," call attention to their large stock of Fruit and Ornamental Trees, a fuller account of which can be obtained by sending for their catalogues.

Messrs. Bronson, Graves, & Selover, of Geneva, N. Y., are well known and reliable nurserymen, who we believe advertise in the *Farmer* this month for the first time. We hope our friends will convince them that the readers of the *Genesee Farmer* know how to appreciate good fruits, ornamental trees, shrubs, &c.

J. D. Conklin, of Locke, Cayuga county, N. Y., also offers "fruit trees of all kinds." He does not believe in "root-grafted trees," and sends out only those which are budded.

J. H. Foster, Jr., of West Newton, Pa., offers a choice collection of Strawberries, including the great Agriculturist. He also sends grape vines by mail, free of postage, which, now that postage on seeds, plants, &c., is so cheap, is a great convenience to those ordering from a distance.

J. M. Thorburn & Co., of New York, the well known seedsmen announce a new catalogue of Dutch bulbous roots. Those who have never raised hyacinths and other bulbous flowers should set out a few this fall. Nothing is so beautiful in the early spring when our gardens are destitute of flowers, and there is no difficulty in growing them.

D. S. Heffron, of Utica, N. Y., will send grape vines of all the leading kinds "cheap as the cheapest, and good as the best."

R. B. Shaw, of Canandaigua, N. Y., also offers a large quantity of grape vines.

E. Williams, Mount Clair, N. J., calls attention to the new Kittatinny Blackberry, which those who have seen it in bearing recommend most highly. Further particulars can be obtained by sending for one of his circulars.

G. H. Banta, of Tappantown, N. Y., offers apple trees at low prices.

The Clover Thresher and Huller, manufactured by S. J. Sayles, of Clyde, N. Y., is said to be all that is claimed for it.

The Craig Microscope, advertised by G. G. Meed, of Thompsonville, Wis., is one which we have repeatedly used, and can commend it to our readers.

The Brinkerhoff Churn, made by Jacob Brinkerhoff, of Auburn, N. Y., we have used for over a year, and like it very much.

"The Berlin (C. W.) Monthly Market," for the sale of cattle, sheep, butter, &c., will be held September 7. We like the idea of such markets, and would like to see them more common. They are very convenient both to buyers and sellers.

#### Agriculture in New Jersey.

WE are pleased to learn that Luther H. Tucker, of the *Country Gentleman*, has accepted—for the present at least—the Professorship of Agriculture at Rutgers College, New Jersey. This College, or more correctly speaking the Scientific School connected with it, has received the appropriation to that State under the act of Congress giving twenty thousand acres of Government land to each Senatorial District in the different States for the support of Agricultural Colleges. As the State is not large, it is far better to give the money to an existing institution than to attempt the establishment of a separate Agricultural College. Rutgers College is fortunate in securing such a man as Professor Tucker. The son of the oldest living agricultural editor in this country, he may be said to inherit a love for the theory and practice of farming. A graduate of Yale College, for several years the working editor of the *Country Gentleman*, and who has made extensive agricultural tours in this country and in Europe, an eloquent speaker and an earnest and ready writer, he can not fail to give character to the institution with which he is connected, and we can not but hope that his other engagements will allow him to accept, permanently, this appointment, unless, indeed, his services should be needed in our own State.

#### To Measure Corn in the Crib.

THE usual rule, we believe, is to multiply the length, breadth and height of the crib together in feet; multiply the product by 8 and divide by 10. The result will be the number of bushels of ears. In this section we reckon two bushels of ears to make one of shelled corn. In the West three bushels of ears, we believe, are reckoned equal to two bushels of shelled corn.

As an example: Supposing a crib to be 14 feet long, 5 feet wide, and 10 feet high, it would contain 560 bushels of ears, or 280 bushels of shelled corn.



**Agricultural Exhibitions for 1865.****State Fairs.**

Ohio.....	Columbus.....	Sept. 12-15
New York.....	Utica.....	Sept. 12-15
Canada West.....	London.....	Sept. 15-23
Illinois.....	Chicago.....	Sept. 4-9
N. Eng. A. S. Society.....	Concord, N. H.....	
Pennsylvania.....	Williamsport.....	Sept. 26-29
Canada Lower.....	Montreal.....	Sept. 26-29
Michigan.....	Adrian.....	Sept. 19-22
Iowa.....	Burlington.....	Sept. 26-29
Indiana.....	Fort Wayne.....	Oct. 2-7
California.....	Sacramento.....	Sept. 11-15
American Institute.....	New York.....	Sept. 12 to Oct. 19
Wisconsin.....	Janesville.....	Sept. 27-29

**County and Town Fairs.****NEW YORK.**

Albany and Rensselaer.....	near Albany.....	Sept. 19-22
Chautauque.....	Westfield.....	Sept. 5-7
Gorham.....	Reed's Corners.....	Sept. 8
Jefferson.....	Watertown.....	Sept. 5-7
Manlius and Pompey.....	Manlius Village.....	Sept. 28-29
Moriah.....	Port Henry.....	Sept. 28-29
Oneida.....	Rome.....	Sept. 25-28
Oswego.....	Mexico.....	Sept. 19-21
Ontario.....	Canandaigua.....	Sept. 20-22
Oxford.....	Oxford.....	Sept. 25-27
Putnam.....	Carmel.....	Sept. 13-15
Rushville.....	Rushville.....	Sept. 26-27
Saratoga.....	Saratoga Springs.....	Sept. 5-8
Susquehanna Valley.....	Unadilla.....	Sept. 21-22
Washington.....	Salem.....	Sept. 27-29
Chenango.....	Norwich.....	Sept. 18-20
Cattaraugus.....	Little Valley.....	Sept. 26-28
Cayuga.....		Oct. 3-5
Dutchess.....	Washington Hollow.....	Sept. 26-28
Genesee.....	Batavia.....	Sept. 20-21
Monroe.....	Rochester.....	Sept. 26-28
Otsego.....	Cooperstown.....	Oct. 3-5
Queens.....	Flushing.....	Oct. 4-5
Suffolk.....		Sept. 27-28
Ulster.....	Kingston.....	Sept. 20-22

**Inquiries and Answers.**

**CULTIVATOR FOR HEAVY SOILS.**—I wish to inquire which is the best cultivator for a rather stiff and heavy soil. I want something that will run deeper and loosen up the soil more than the old cultivator teeth do. I notice that the Johnston Cultivator, manufactured by Remington & Sons, is well recommended. Which is the best, the Johnston or the Hyde & Wright? Is the latter really valuable as a potato digger? I should think it would leave many of them covered up, and perhaps cut or bruise them.—H., Worcester county, Mass.

The Johnston Cultivator, on heavy land, is the best we have ever used. Hyde & Wright's shovel-plow is an excellent implement, but we have never used it for digging potatoes, though we should think it would answer the purpose better than the ordinary plow.

**GALLS ON HORSES.**—(R. W.) We seldom do anything except to wash the shoulders repeatedly with cold water, and put the collar so as to ease the sore spot. If the skin is broken, a little mutton tallow should be applied to keep the air from the sore. It is said to be a good plan to keep a little, very fine, white lead in a paper in your pocket, and when you stop your team, several times during the day, dust a little on the galled places. White lead and milk applied several times a day, with a gentle rubbing, is said to be excellent.

**DITCHING PLOW.**—(J. H.) McFarland Bros., of Union Springs, N. Y., make a good ditching plow for breaking up hard soils in drains. Where the land is soft such a plow is not necessary, but where it is very hard it saves much labor. The price is \$10.

**CLOVER SEED HARVESTER.**—I would like to find out through your paper where I can get a good machine for heading clover seed, or a description how to make one. Manufacturers ought to advertise more, and also give the price of every article. We want seed drills for different kinds of seed. Manufacturers would sell more if they would make it known to folks at a distance where and what they make, and how they sell.—D. G., Coesse, Ind.

We do not know of a good clover seed harvester. If any of our readers do we should be glad to hear from them. Our correspondent is right in regard to manufacturers advertising more liberally. It would pay them and benefit the farming community.

**POTATO DIGGER.**—Do you know of a good, efficient machine for digging potatoes?—J. SALTER, Chili, N. Y.

There are several potato-digging machines which "promise well," but they have not been sufficiently tested to warrant a decided opinion in regard to their merits. We hope these machines will all be exhibited at the coming State Fair, and if possible an opportunity be afforded for a trial. A good potato digger is much needed.

We would call particular attention to Mr. Stone's auction sale of thorough-bred cattle, sheep, &c., at Guelph, C. W., October 4. We need hardly remark that Mr. Stone's herds and flocks are among the choicest on this side of the Atlantic.

**Special Notices.**

**Away with Spectacles.**—Old eyes made new, without Spectacles, Doctor or Medicine. Pamphlet mailed free on receipt of ten cents. Address E. B. FOOTE, M. D., No. 1130 Broadway, New York. an2t

**ADVERTISEMENTS.**

A FEW short advertisements of interest to farmers—and only such—will be inserted in the GENESEE FARMER at twenty-five cents a line, or \$2.50 per square, or \$25 per column, each insertion, payable in advance.

**THE GENESEE FARMER:**

A MONTHLY JOURNAL OF AGRICULTURE AND HORTICULTURE.

Published at Rochester, N. Y., by

JOSEPH HARRIS.

**Terms**—INVARIABLY IN ADVANCE—One Dollar a year. In clubs of five and upwards, Eighty Cents each.

**PRINCE & CO.'S CATALOGUES.**—Of all the departments of the Linnaean Nurseries and Gardens, Flushing, N. Y., will be mailed to applicants who remit two stamps for each one. \*2t

**20,000 GRAPE VINES FOR SALE.**

40 BEST NATIVE VARIETIES. Also other small fruits. Send for a Catalogue. It\* R. B. SHAW, Canandaigua, N. Y.

**IMPORTANT TO TREE DEALERS.**

20,000 APPLE TREES—leading varieties, at very low prices. For particulars address sep G. H. BANTA, Tappanstown, N. Y.

**THE KITTATINNY BLACKBERRY,**

HAVING proved its superiority over all others, and thus endorsed by the highest authority is now offered to the public in limited quantities at reasonable rates.

Inclose stamp for testimonials, &c., and address

self

E. WILLIAMS, Mount Clair, N. J.

**GRAPEVINES.**

DELAWARE, DIANA, CONCORD and HARTFORD PROLIFIC VINES, of superior quality, all propagated from fruit-bearing vines, and grown in the open ground. Also, Adirondack, Iona, Israella, Allen's and Rogers' Hybrids, &c., &c. Our Price List is sent post-paid to all applicants. Address [It] C. L. HOAG & CO., Lockport, N. Y.



## FRUIT & ORNAMENTAL TREES FOR FALL OF 1865.

**ELLWANGER & BARRY** have the pleasure of offering their usual large and complete stock of

**STANDARD AND DWARF FRUIT TREES,  
GRAPES,**

both Hardy and Foreign—old and new varieties.

**STRAWBERRIES**

and other Small Fruit—all varieties worthy of cultivation.

**Ornamental Trees, Flowering Shrubs,  
Evergreens, &c.**

**R O S E S ,**

including a fine collection of STANDARDS three to five feet high.

**TREE AND HERBACEOUS PEONIES,**  
a great collection of new and beautiful varieties.

**Bulbous Flower Roots, &c. &c.**

The stock is vigorous, well-grown, and in every particular first class.

Planters, Nurserymen and Dealers are invited to inspect the stock personally, and to examine the following Catalogues, which give full particulars, and are sent prepaid to applicants who inclose stamps, as follows:

Nos. 1 and 2, ten cents each, No. 3, five cents, No. 4, three cents.

No. 1.—A Descriptive and Illustrated Catalogue of Fruits.

No. 2.—A Descriptive and Illustrated Catalogue of Ornamental Trees, Shrubs, Roses, &c., &c., &c.

No. 3.—A Catalogue of Dahlias, Verbenas, Petunias, and select new Green house and Bedding Plants, published every spring.

No. 4.—A wholesale Catalogue or Trade List, published every autumn.

**ELLWANGER & BARRY,**  
sep MOUNT HOPE NURSERIES, ROCHESTER, N. Y.

**See Grapevine Advertisement.**

BY MAIL, POSTAGE PAID.

**GREAT AGRICULTURIST!**

and other varieties of Strawberry Plants.

Best Berry yet produced—the Premium taken.

**THE GREAT AGRICULTURIST**

at the following prices:

**75 cents per dozen—\$2.50 per fifty.**

Also, the following leading varieties:

**BURR'S NEW PINE**, best flavored.

**WILSON**, productive.

**BOSTON PINE**, excellent.

**TRIUMPH DE GAND**, market, profitable.

**FILLMORE**, early, good.

**40 cents per dozen—\$1.50 per hundred.**

**J. H. FOSTER, JR.**

Box 660, West Newton, Westmoreland county, Pa.

**See Grapevine Advertisement.**

### Berlin Monthly Market.

**T**HE first market for the sale of CATTLE, SHEEP, BUTTER, and FARM PRODUCE generally, will be held on the New Fair Ground on

**Thursday, September 7th, 1865,**

when Premiums amounting in the aggregate to FIFTY DOLLARS will be awarded for the best Cattle, Sheep and Butter exhibited.

For particulars see handbills.

**HUGO KRANZ, Town Clerk.**

Berlin, C. W., September 1, 1865.

## FROST & CO., GENESEE VALLEY NURSERIES, Rochester, N. Y.,

Offer an immense stock of well-grown

**Standard and Dwarf Fruit Trees,  
SMALL FRUITS, ORNAMENTAL TREES,  
SHRUBS, PLANTS, &c., &c.,  
FOR THE AUTUMN OF 1865.**

**N**EARLY FOUR HUNDRED ACRES are occupied in their cultivation. The public are solicited to examine the following Catalogues, which give full particulars of their Stock, Prices, &c., and will be mailed Prepaid to all applicants on receipt of five cents for each.

No. 1 and 2—Descriptive Catalogue of Fruit and Ornamental Trees.

No. 4—Wholesale Catalogue for Nurserymen, Dealers and others, who wish to buy in large quantities. Address  
sepl FROST & CO., Rochester, N. Y.

**BOOK AGENTS WANTED.**

**READY IN A FEW DAYS.**

**THE HISTORY OF THE REBELLION,**

**I**SSUED by the **AUBURN PUBLISHING CO.**, in two Octavo Vols., 1600 pages, 200 PORTRAITS, MAPS, DIAGRAMS, &c. The **FIRST**, cheapest and **BEST** History published. A rare chance for Agents. NEW ILLUSTRATED ORDER Book now ready. Terms very liberal. For Circular, Terms &c., write to **E. G. STORKE, Auburn, N. Y. 2**

### 250,000 Pear Trees.

**W**E have an immense stock of first quality STANDARD AND DWARF PEAR TREES, suitable for transplanting in Orchards and Gardens. Also, an extensive stock of second and third sizes, suitable to transplant into Nursery Rows, and grow two to three years to form fine and extra sized trees—any of which will be sold by the hundred or thousand at the lowest rates for same quality. For description and prices, address with stamp inclosed,  
sepl FROST & CO.,  
Geneese Valley Nurseries, Rochester, N. Y.

### DUTCH BULBOUS ROOTS FOR THE TRADE.

**W**HOLESALE PRICES OF BULBS may now be had by addressing  
J. M. THORBURN & CO.,  
15 John street, New York.

✉ Retail Descriptive Catalogue ready 1st September. 1t

### PREMIUM WHITE CHESTER PIGS FOR SALE.

**T**HE HOG BREEDERS MANUEL, with Circulars and Prices, sent free of charge. Address  
se3t N. P. BOYER & CO., Gum Tree, Chester Co., Pa.

### SUPERIOR DRAIN TILE

**M**ADE of the celebrated, strong, tenacious clay of Woodbridge, N. J., burned with intense heat over the Fire Brick, in Fire Brick Kilns, and sold at moderate prices, as the clay MUST be removed from over valuable beds of the best White Ware and Fire Brick Clay. Also double glazed Stone Ware Pipe, with collars for making water-tight pipe to conduct pure water free from rust and poison. Stove Linings and Fire Brick, &c., &c., of best quality. Shipped by railroad or water direct from factory, on Ship Channel of Raritan River, 27 miles from New York city.

se3t CROSSMAN BROS. & CO., Woodbridge, N. J.

### FRUIT TREES OF ALL KINDS.

**A**LSO, GRAPE VINES and Small Fruits, EVERGREENS. APPLE TREES, budded or worked on whole seedling stocks (and no others). After twenty years experience in the nursery, I am satisfied that if a man consults his own interest he will not plant root-grafted apple trees. My trees are grown on high ground—soil gravelly loam. Address  
se2t J. D. CONKLIN, Locke, Cayuga county, N. Y.



## THE GREAT FAMILY NEWSPAPER.

NOW IS THE TIME TO SUBSCRIBE.

### THE NEW YORK WEEKLY TRIBUNE

Is printed on a large double medium sheet, making eight pages of six columns each, and containing the choicest matter of the Daily issue, including a News Summary, Domestic and Foreign; Legislative and Congressional matters; War News; Stock, Financial, Cattle, Horses, Dry Goods and General Market Reports, Report of the American Institute, Farmers' Club, &c., &c.

The Reports of the American Institute, Farmers' Club, and the various Agricultural Reports, in each number, are richly worth a year's subscription. Read what a subscriber in St. Louis says:

St. Louis, Mo., July 16, 1865.

To the Editor of the Tribune:

DEAR SIR: I have had it in contemplation for some time, to write and tell you of the pleasure I get from the weekly perusal of the proceedings of the Farmers' Club; first I will tell you how recently I became aware of its existence. About the first of September, 1863, I noticed an advertisement, and a cut of the Tribune Strawberries, and immediately subscribed for the Weekly Tribune, in which I found the proceedings of your Club. I have read them constantly, until they have become to me a necessity, and I look for Monday as red letter day in my calendar, and was I to be confined to one agricultural paper alone, should prefer The Tribune to anything I have yet seen.

Yours,

JOHN HENWOOD.

Another subscriber writes:

I neglected (forgot) to renew my subscription to The Tribune, until so late that I missed the first July number. Can you help me to it? Portions of the Farmers' Club Reports in that number particularly I wish to preserve. In fact, that feature of the paper constitutes one of the main reasons why I take it. And I have no doubt, that it receives a goodly share of its patronage from persons who wish it well, but would not otherwise bring themselves to the subscribing point.

Yours truly,

O. A. ALEXANDER.

Waynesville, Ill., July 25.

#### TERMS.

Mail subscribers, single copy, 1 year—52 numbers.....\$ 2 00  
Mail subscribers, clubs of five..... 9 00  
Ten copies, addressed to names of subscribers..... 17 50  
Twenty copies, addressed to names of subscribers..... 34 00  
Ten copies, to one address..... 16 00  
Twenty copies, to one address..... 30 00  
An extra copy will be sent for each club of ten.

Drafts on New York, or Post-office Orders, payable to the order of "The Tribune," being safer, are preferable to any other mode of remittance. Address

sepl

THE TRIBUNE, New York.

### Foot Rot in Sheep

CAN BE THOROUGHLY CURED BY USING  
WHITTEMORE'S  
CURE FOR FOOT ROT IN SHEEP.

It has been tested in most sheep-growing districts and effected  
POSITIVE CURES

where everything else failed. Certificates can be had on application to the proprietor.

Ask for WHITTEMORE'S CURE, for sale by all druggists, and by Post & Bruff, Rochester; WIGHTMAN & Co., Bath, N. Y.; and by the sole manufacturer, F. W. WHITTEMORE, Chatham Four Corners, N. N.

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For sale by A. M. HALSTEAD, New York, F. BISSELL, Toledo, Ohio, and by the subscribers in this city.

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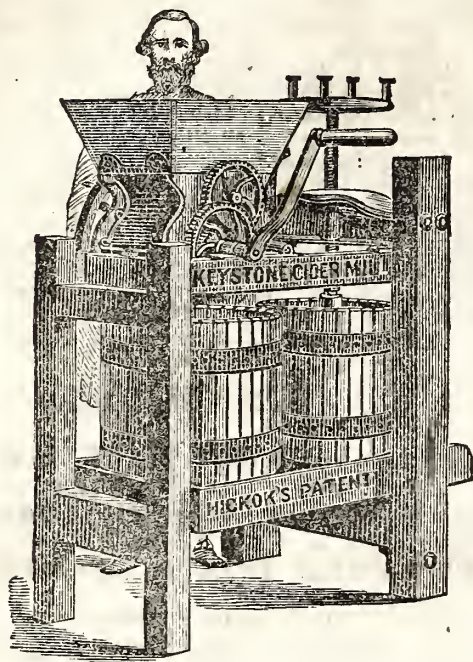
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12,000 in Use and all Approved.



THIS admirable machine is now ready for the fruit harvest of 1865, is made in the most perfect manner with either one or two tubs, and is well worthy the attention of all persons wanting such a machine. It has no superior in the market, and is the only mill that will properly grind grapes.

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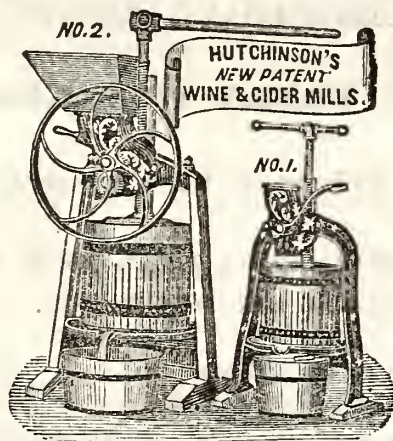
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If your merchant does not keep them, tell him to send for one for you, or write for one yourself. Address the manufacturer, jy4t

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CELEBRATED



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WINE AND CIDER MILL.

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COURSES OF AGRICULTURAL INSTRUCTION—Including the Practice of Agriculture and Horticulture, Agricultural Chemistry and Physiology, Principles of Breeding and Feeding, Injurious Insects, Rural Economy, Forestry, French and German Languages, &c.,—

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For detailed Programme, apply to

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Sheep Wash Tobacco

I hereby certify, that I have been familiar with all the processes employed by the South Down Company in the manufacture of their "Sheep Wash Tobacco," and that the article prepared under Mr. Jaques' Patent contains all the useful principles of the Tobacco in a concentrated form.

This Paste, employed as a Sheep Wash, according to the directions furnished by the Company, has the effect of curing Scab and other cutaneous diseases, and destroying all parasitic insects which infest the skin and wool of the Sheep, and thereby improves the health of the animal, as well as the quality of its fleece. Employed in the same way, the solution being made stronger, it will destroy those insects which infest the skins of larger animals, and also those that are injurious to vegetation.

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Assayer to the State of Massachusetts, and  
Consulting Chemist.

Wool Growers should beware of any preparation that contains "sulphur," as it is sure to destroy the fibre of the wool. One pound of *Extract Tobacco* will make twelve gallons Wash, and contains the strength of eight pounds of Tobacco, as prepared by farmers.

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\*\* Farmers, preserve this advertisement, and ask your storekeepers to keep the Wash for sale. A liberal discount to the retailers. feb9t

Babbittonian Penmanship.

THIS SCIENTIFIC and SELF-TEACHING system, which is being ordered by the thousand and sent to every part of the Union, consists of nearly one hundred copies on self-explaining card-board copy slips, and will guide the learner to an elegant command of the pen without schools or teachers. Terms, post-paid to all parts of the Union, \$1.50. Terms to Teachers and Clergymen, \$1.

"The Babbittonian system of Penmanship is splendid."—J. H. Myers, *Spencerian Penman*.

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GOLD MEDAL

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Send for Circular, or forward money for Penmanship to BABBITT & WILT, Principals of *Miami Commercial College*, Dayton, Ohio. dec'64tf



New Patent Animal Fetters.

JUST the thing that farmers need for fettering Horses, Mules, and cattle, when turned out to pasture, to prevent jumping, running, escape, or damage. They are made of malleable iron, light, strong, and not liable to get out of order.

Price, \$2 50. Dealers in Hardware and Agricultural Implements, &c., please forward their names for full description and prices to the trade by the dozen, to

JOSEPH BRIGGS,  
335 Broadway, New York.

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Old Eyes Made New

WITHOUT SPECTACLES, DOCTOR OR MEDICINE.

Pamphlet mailed free on receipt of ten cents. Address E. B.

FOOTE, M. D., No. 1130 Broadway, New York.

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## Seymour's Patent Tree Protector.

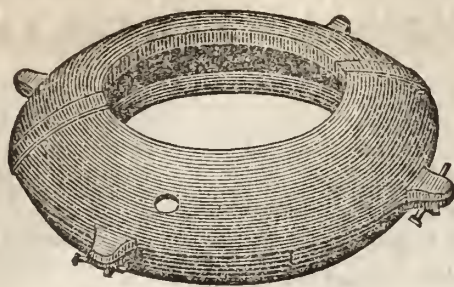


Fig. 1.

Fig. 1 represents the Protector with all the parts together, and showing the mode of fastening them. The small hole is designed for pouring in oil, and should be kept closed.

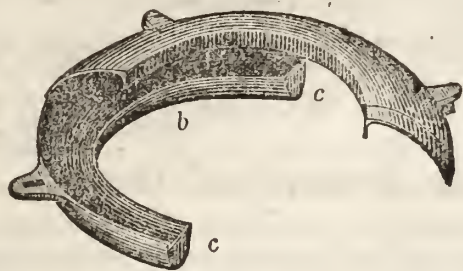


Fig. 2.

Fig. 2 represents a section of the same. The cover *a*, and the trough, *b*, are each a half circle. The ends of the trough, *c, c*, are closed on each section to prevent leakage.

If these Protectors are applied in season, they will catch the female moths (which do not fly,) of the tent caterpillar or nest worm, the canker or measure, and Palmer worms, and all other insects that crawl up the bark, and which are so injurious and destructive to our orchards and shade trees. It is believed that the curenlio or plum weevil may be caught in this manner. The caterpillar moths go up the tree to deposit their eggs about the last of June or first of July, and the moth of the canker or measure, and Palmer worms go up about the first of October, and in the spring as soon as the frost leaves the ground. At all such times the Protectors should be applied. If properly attended to, we have no hesitation in saying that they will prove a sure protection against these terrible pests.

The cover is made to project over the trough towards the tree resting on and the whole supported by four nails driven into the trunk at equal distances apart. It is designed to leave a space of about one-half inch between the cover and tree to allow for growth of tree. This is filled with a packing of twisted straw or old rope to prevent the insects passing through. The trough when filled with oil will catch and destroy all insects as they pass up the tree.

The Protectors are made of cast iron, nicely japanned, and of all sizes to fit any sized tree. We own the exclusive right to manufacture and sell them throughout the United States, and are prepared to furnish them in quantities to suit purchasers, from our manufactory in New Britain, Conn., and from our warehouse No. 58 Beekman street, New York.

WANTED.—One Hundred Agents to canvass and sell the above Tree Protector, to whom liberal inducements will be offered. None need apply without proper testimonials as to character, &c. For further particulars send for circular.

au2t P. & F. CORBIN, New Britain, Conn.

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## ROCHESTER CENTRAL NURSERIES.

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AND

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ORDER YOUR TREES DIRECT.

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HIGHEST PREMIUM

ELASTIC STITCH

AND

LOCK STITCH

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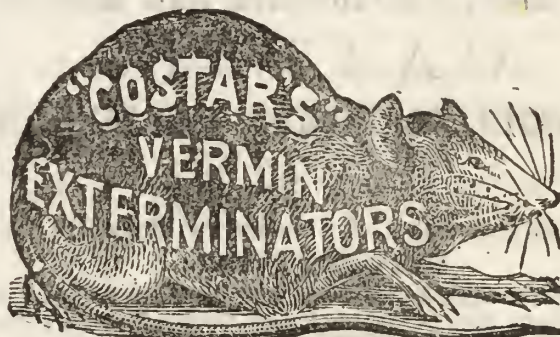
AND

48 STATE STREET,

Rochester, N. Y.

1865.

1865.



"18 years established in N. Y. City."

"Only infallible remedies known."

"Free from Poisons."

"Not dangerous to the Human Family."

"Rats come out of their holes to die."

## "Costar's" Rat, Roach, &amp;c., Exter's,

Is a paste—used for RATS,  
MICE, ROACHES, BLACK and  
RED ANTS, &c., &c., &c., &c.

## "Costar's" Bed-Bug Exterminator,

Is a liquid or wash, used to  
destroy, and also as a pre-  
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## "Costar's" Electric Powder for Insects,

Is for MOTHS, MOSQUITOES,  
FLEAS, BED-BUGS, INSECTS ON  
PLANTS, FOWLS, ANIMALS, &c.

Sold by all Druggists and Retailers everywhere.  
!!! BEWARE !!! of all worthless imitations.  
See that "Costar's" name is on each Box, Bottle, and  
Flask, before you buy. **HENRY R. COSTAR.**

PRINCIPAL DEPOT, 482 BROADWAY, N. Y.  
Sold by all Druggists in Rochester, N. Y.

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## TILE MACHINE.

THE BEST MACHINE IN AMERICA. Send for a Circular  
containing description. **A. LA. TOURETTE,**  
Waterloo, N. Y.

ap65tf



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Moreton Lodge, Guelph, Canada West.

## SIXTH ANNUAL SALE OF

Pure Bred, Shorthorned and Hereford

CATTLE,

COTSWOLD, SOUTHDOWN AND LEICESTER

RAMS,

Berkshire Pigs, Aylesbury Ducks, and  
Dorking Fowls.

MR. KNOWLES has received instructions from FRED. WM.  
STONE, Esq., of Moreton Lodge, Guelph, Canada West, to  
sell by AUCTION, without reserve, on

Wednesday, October 4, 1865,

a choice selection of about twenty-five head of young Bulls, Cows  
and Heifers, in good condition, from his celebrated herds of  
Shorthorned and Hereford Cattle, bred from the most fashionable  
and well-known herds of the day.

Also, will be offered about forty magnificent Shearling and  
Older Rams, consisting of full-blooded Cotswolds, Southdowns  
and Leicester, in fine condition, large size, good quality and well-  
wooled, got by the Prize Rams; and about twenty prime young  
Berkshire Pigs (boars and sows) of the purest blood.

TERMS—Under \$25, cash; \$25 to \$100, three months; over  
\$100, six months credit on approved endorsed notes, if required.

☞ Sale to commence with Pigs and Poultry at 10 A. M.  
Luncheon at 12. Sale resumed promptly at 1 P. M.

☞ Catalogues with pedigrees and other particulars may be  
had on application to Mr. KNOWLES or of Mr. STONE, Guelph,  
C. W.

## THE EXCELSIOR

CLOVER THRESHER AND HULLER.

Manufactured by S. J. SAYLES, Clyde, Wayne county, N. Y.  
The BEST combined

## CLOVER MILL

manufactured in the State, doing MORE and BETTER WORK  
than any other mill.

All orders promptly attended to.

It\* S. J. SAYLES, Clyde, Wayne co., N. Y.

SECRET ART of Catching Fish, in any water, as fast as  
you can pull them out, and no humbug. Sent for 20 cents,  
by addressing Box 43, Southwick, Mass.

## New York State Fair.

## IMPORTANT NOTICE.

DURING the State Fair to be held at Utica, N. Y., Sept. 12-15,  
the undersigned has made arrangements to issue a four or  
five column paper, to be devoted to advertisements and reading  
matter. **Three Thousand Copies** will be printed and  
distributed gratuitously throughout the city and on the Fair  
Ground each day of the Fair—making an aggregate of **Twelve  
Thousand Copies**. This will afford one of the very best  
of mediums to exhibitors, merchants and manufacturers to bring  
their goods into notice. It will not, like a circular, be thrown  
away before it is read, but will be a *live paper*, and got up in such  
a shape that it will be preserved for future reference.

## RATES OF ADVERTISING.

One column.....	\$30.00	One-third column.....	\$12.00
One-half column.....	16.00	One-quarter column.....	9.00
Business Cards.....\$3.00.			

The above rates are not for a *single* day, but include the four  
days of the Fair.

☞ Advertisers wishing to avail themselves of this opportu-  
nity should send on their "copy" at once, stating the amount of  
space they wish their advertisement to occupy.

Address H. G. PARISH, Rochester, N. Y.,  
Care Genesee Farmer.

## The Brinkerhoff Churn.

"WE have long despaired of finding a patent Churn which  
would in all essentials surpass the old dash-churn, but  
believe we must succumb at last. If we mistake not, the Brin-  
kerhoff Churn will prove the long-sought desideratum among but-  
ter-makers."—*Rural New Yorker* of 1863.

"The Brinkerhoff Churn seems to stand the test well. We  
have lately received several communications in its favor in an-  
swer to an article lately published in the Rural. We are glad to  
know that the churn has maintained the character we gave it  
when first introduced."—*Rural New Yorker* of 1865.

"This churn has, for the last three years, stood the only deci-  
sive test, that of actual use in good dairies, and has come out ap-  
proved. There can be no doubt of Mr. Brinkerhoff's having dis-  
tanced all competitors, and his churn must inevitably come into  
general use. It not only reduces the once laborious and tedious  
business of churning to a few minutes, but it **actually at-  
tains a better result** than can be reached by the old pro-  
cess. So much we can say after using this churn for years."—  
*Northern Independent, New York*.

☞ The price for common size for churning one to six gal-  
lons, \$10—shipped to order on receipt of price. For Churns or  
Territory, address  
sept JACOB BRINKERHOFF, Auburn, N. Y.

## Standard Pears,

2 to 4 years, very strong and fine. Good assortment of varieties.

**Dwarf Pears**—2 to 3 years, very stocky and strong.

**Apples**—Standard and Dwarf—thrifty.

**Cherries**—1 and 2 years.

**Plums**—2 and 3 years.

**Peaches**—1 year.

**Small Fruits**—AGRICULTURIST and other Strawberries.

EVERGREENS, ORNAMENTAL TREES, SHRUBS,  
ROSES, &c.

We have paid special attention to the cultivation of the NEW  
HARDY GRAPES, and offer strong, well-grown plants of IONA,  
ADIRONDAC and ISRAELLA by the hundred or thousand at low  
rates.

ALSO,

DELAWARE,  
CONCORD,  
DIANA,  
REBECCA,

ALLEN'S HYBRID,  
H. PROLIFIC,  
ROGERS' HYBRID,  
CREVELING,

and nearly all the valuable kinds. Also, a splendid lot of DELA-  
WARE and DIANA LAWERS, many of them with 6 feet bearing  
wood.

Address with stamp for Price List,  
BRONSON, GRAVES & SELOVER,  
sept8t WASHINGTON STREET NURSERY, Geneva, N. Y.

## GRAPE VINES.

ALL THE BEST SORTS

by the dozen, hundred or thousand. Cheap as the cheapest, and  
good as the best.

Also, a full assortment of

**GOODRICH'S SEEDLING POTATOES.**

☞ Circulars free. Address  
sept8t D. S. HEFFRON, Utica, N. Y.





## WALKS AND TALKS ON THE FARM.—NO. 22.

MY Virgalieu pears, which last year were entirely worthless from being cracked and spotted, are this year comparatively free from the disease. Mr. DANFORTH says his are also fair, and Mr. SEELYE told me to-day that he has a few Virgalieu trees, the fruit of which has been so cracked for several years, that he did not think it worth his while even to look at them. But on walking through the orchard the other day he was surprised to find the fruit quite good and comparatively free from specks. Would it not be splendid if we should be able once more to raise good old fashioned crops of Vergalieu! There is no pear equal to them. Most people, however, have given up all hopes of ever again being able to raise them and have grafted over their trees with Louise Bonne, Duchesse d'Angouleme, Bartlett, &c. I suppose the reason of their comparative freedom from this disease the present season, is owing to the wet, cool weather. It is a well known fact that the fungus which causes apples and pears to become spotted and cracked flourishes best in a dry atmosphere, and if we could find out the exact time when the fungus first attacks our pears we might perhaps be able to save the crop by syringing the trees occasionally for a few days.

"Will it pay to fat sheep the coming winter?" It will not pay if every one goes into it. Such large profits were made last winter that it is probable more sheep will be fattened the coming winter than usual. The profit of fattening sheep in winter does not consist so much in their increase of weight as in the increased price per pound. If sheep in good condition can be bought at this time for four cents per lb. live weight, and the price next spring should be eight cents, it will pay, if grain and hay are no higher than at present.

Last March, good fat sheep were worth ten cents a lb. live weight, and in some instances twelve cents; while the fall before good fair sheep could be bought for five and six cents. Grain and hay were high, but, as can readily be seen the profit of fattening sheep was very large.

Sheep will eat about three lbs. of hay a day or its equivalent. But it is poor economy to keep them on hay alone. The digestive organs of a sheep are far less capacious, in proportion to the size of the animal, than those of the ox; and consequently sheep require a more concentrated food. In some sections of England, (Shropshire for instance,) the farmers have been in the habit of fattening sheep on turnips alone, but it is now conceded that it is far better to feed more grain and less turnips. We are in no danger of feeding too many turnips in this country, but when grain is as high as it is likely to be the coming winter, many farmers will hesitate to feed much of it out to sheep. When sheep are well protected from storms and are not compelled either to eat snow or wade through it for water, but where they have free access to the drinking troughs and are regularly fed, at the same hours, three times a day, and especially early in the morning, we presume it is possible to fat sheep on hay alone, but it is far better to give them some grain.

In the grain districts where straw is, or ought to be, abundant, good, bright wheat straw, cut before the wheat was fully ripe, should be the main food in fattening sheep, with an occasional feed of corn stalks by way of variety. This, with from half a pound to a pound of corn to each sheep per day, will be cheaper than hay, and more fattening. In the latter part of winter more or less hay may be fed with advantage, if it is desired to make the sheep very fat.

But it is somewhat questionable in my mind whether it will pay to try to force the sheep too much. If the profit of fattening sheep in winter depended solely on the increase of weight, it would probably pay to give them the richest food and force them as much as possible. But where the profit is derived principally from the greater scarcity, and consequently higher price of fat sheep in early spring than in the fall, a system of feeding that will keep them gradually gaining a little may be the most profitable. But take a pencil and let us figure a little.

If sheep are put up to fatten on the first of No-



vement and kept till the first of March, say four months, a very respectable increase for ordinary Merinos would be 20 lbs. By high feeding they may perhaps be made to increase 30 lbs. But will the extra 10 lbs. pay for this extra feeding—that is will it pay for the richer and more concentrated food that it will be necessary to feed? If this extra 10 lbs. of fat will so improve the *quality* of the sheep that the butcher will pay two or three cents a lb. more for the mutton, then it will be *very* profitable, but if he will pay no more per lb. than for moderately fat sheep, then I question whether the moderate system of feeding would not be the more profitable. But one thing is certain, the sheep must be fed grain enough to keep them in a good thriving condition.

I know a farmer who has bought a flock of 200 Merino wethers and barren ewes, warranted to average 100 lbs. live weight, for \$4.50 each. Say on the 1st of November they stand him in \$5 a head, and that they weigh 100 lbs. each. Now it is not improbable that sheep will vary in price next spring from 7 to 11 cents a lb. live weight. If these 200 sheep should not increase at all they might sell for 7 cents a lb. (This we will call No. 1.) If they are well fed and increase 20 lbs. each in the four months, (1st of Nov. to 1st of March,) they would probably be worth 10 cents. (This we will call No. 2.) And if they are fed so as to increase 30 lbs. each and are “extra fat,” they would be worth 11 cents. (This we will call No. 3.) The account would stand as follows:

NO. 1.—(HALF FAT, SAME AS IN NOVEMBER.)			
Nov. 1st, 1865.	200 sheep, 100 lbs. each, at 5c.,....	\$1000	00
March 1st, 1866.	200 sheep, 100 lbs. each, at 7c.,....	1400	00
	Leaving for food, attendance, &c.,.....	\$400	00
NO. 2.—(MODERATELY FAT.)			
Nov. 1st, 1865.	200 sheep, 100 lbs. each, at 5c.,....	\$1000	00
March 1st, 1866.	200 sheep, 120 lbs. each, at 10c.,....	2400	00
	Leaving for food, attendance, &c.,.....	\$1400	00
NO. 3.—(EXTRA FAT.)			
Nov. 1st, 1865.	200 sheep, 100 lbs. each, at 5c.,....	\$1000	00
March 1st, 1866.	200 sheep, 130 lbs. each, at 11c.,...	2860	00
	Leaving for food, attendance, &c.,.....	\$1860	00

The cost of feeding 200 sheep for 20 weeks would depend a good deal on the kind of food used. If fed on hay alone, and the sheep eat 3 lbs. of hay per day each, would be:

600 lbs. of hay per day for 140 days—42 tons, at \$14 per ton,.....	\$588
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If fed a ration of  $\frac{3}{4}$  lbs. of corn, 1 lb. of hay and  $1\frac{1}{2}$  lbs of straw. The cost would be:

175 lbs. of corn per day, at \$1 per bushel,.....	\$2 92
200 lbs. of hay per day, at \$14 per ton,.....	1 40
300 lbs. of straw per day, at \$6 per ton,.....	90
	\$5 22
Or for 140 days,.....	\$730 80

If fed a ration of one lb. of corn per day, with the same allowance of hay and straw, as in the last case, the cost would be \$788 20.

This last ration of food would give us “extra fat” sheep, and if we got the price assumed above, it would leave a profit of over one thousand dollars. From this amount must be deducted the cost of attendance, risks of loss, &c. But we must also add the value of the manure.

The value of manure, according to the tables of Mr. Lawes (and they are unquestionably accurate,) would be as follows:

Manure from 14 tons of corn, at \$6 65,.....	\$93 10
“ “ 14 tons of clover hay, at \$9 64,.....	134 96
“ “ 21 tons of straw, at \$2 68,.....	56 28
	\$284 34

I have reckoned the hay as clover hay, the manure from which is worth more than for the same weight of Indian corn. If ordinary meadow hay or timothy is used the manure would not be as valuable. Mr. Lawes gives the value of manure from a ton of clover hay at \$9.64 and from meadow hay at \$6.43.

The profits of extra feeding, provided you get an extra price for the sheep, are very considerable; and, on second thought, I am persuaded that the liberal system of feeding will be most profitable. But shall we get any such prices next spring as we have been calculating upon. Of course no one can tell. But as long as beef keeps at its present price it would seem impossible for good mutton to be very low. We all expected that when peace was established prices would fall; but they are now about as high as they were a year ago, and the present indications are that they will be maintained for some time to come.

“What did I see at the State Fair?” I saw the people—and that is always one of the most interesting features of the Fair. You are always sure to meet many of the leading men in the State. I did not get there till Tuesday evening, and went directly to the “Evening Discussions.” The question was, “Ought Pastures for the Dairy to be kept permanently in grass, or to be renewed by plowing and re-seeding.”\* The dairy farmer needs more straw, and while I would not break up good grass land for the purpose of getting it, there would seem to be no reason why poor grass land should not be broken up and cultivated for two or three years and then re-seeded. If the land is *thoroughly* cultivated, I think a heavier crop of grass can be obtained than by top-dressing without plowing. The great advantage of this system is in giving more straw and more manure.

I have always thought that we should keep more cows on our grain-growing farms. There is no reason why we should not make cheese in this section. We need to keep more stock of some kind in order

\* See Report of Discussions in this number of the *Farmer*, page 301.



to make more manure, and I believe cows will pay better than sheep, especially if we make cheese.

All the speakers from the dairy district, I think without any exception, took ground against plowing up the pastures, while those from the grain districts were generally in favor of breaking up pastures and cropping them a few years and then re-seeding.

I do not think the discussion called out as much valuable information as has hitherto been obtained at these meetings. Mr. CONGER, who has presided for so many years, was not present. He had always something to say that was worth listening to, and endeavored to give a higher and more scientific tone to the discussions.

It has always seemed to me that in the wheat growing districts we plow too much, and in the dairy districts that we plow too little. Of course, no dairy farmer would think of breaking up a good meadow or pasture, but there is much grass land that is over-run with weeds and which affords but little hay or pasture. Now I do not see why such land should not be plowed and thoroughly cultivated for two or three years and then re-seeded.

Dr. ANDERSON has recently delivered a lecture on wool. He has not himself investigated the subject, and brings out no new facts, unless it be that in France they are making an artificial manure from the refuse of the "scoured fleeces."

When we get our Agricultural College established and a good experimental farm connected with it, I hope we shall have some investigations in regard to the growth of wool — how far it is desirable to increase the quantity of yolk, and the *cost of producing it*. The fact that the Cotswold ewe, in the Canadaigua trial, produced as much or more scoured wool in proportion to the real weight of animal as the Prize Merino, and at the same time afforded a splendid carcass of mutton, indicates that this yolk or grease requires a larger amount of food to produce it, and consequently, that the Vermont breeders have made a fatal mistake in directing their skill to the production of the greasiest fleeces.

**IMPORTANT TO FARMERS.**—The Commissioner of Internal Revenue has decided that a farmer who manufactures butter and cheese from the milk produced on his farm is not subject to license tax, though he manufactures more than \$1,000 worth per year. Such products are legitimately derived from his business as a farmer, and are ordinary farm products.

THERE is much wisdom in a few words spoken by an English farmer who advised "to feed land before it is hungry, to rest before it is weary, and to weed it before it is foul."

## IMPLEMENTS AND MACHINES AT THE STATE FAIR.

EACH successive State Fair brings out some new contrivance for lessening labor and facilitating farming operations. When the Fair was held at Utica two years ago, the "Hay Tedder" was exhibited for the first time. It has since been extensively introduced and will soon be found on every farm where hay is a leading crop. The Benton Hay Press made its appearance the next State Fair, and this year we have an apparatus for elevating the hay on to the wagons in the field. The hay is raked into wind-rows, and the hay elevator is attached to the hind end of the wagon. The wagon is then driven along the wind-row — the horses and wheels going on each side of it. The elevator follows behind and with an endless chain carries the hay on to the load.

Here we have three new machines used in hay making alone, brought out in three years. We cut the hay with a mowing machine, shake it out with a "tedder," draw it up with a self lifting steel-toothed rake and pitch it on to the wagon with a self operating elevator; then a horse fork will carry it into the barn. We have not yet a machine for "stowing it away;" but it may be that we shall press it into bales in the field and then stow it away in a corner of the barn! Hay so put up would keep very sweet and nice.

We have sometimes thought that there were greater improvements in the implements and machines necessary for harvesting the crops than in those connected with their cultivation. It may be that this is more seeming than real. A slight improvement in the strength and effectiveness of a plow, with lightness of draft, is of universal importance in the implement used so constantly for six or eight months in the year. And yet such an improvement would attract little attention—at least from novelty seeking editors. There can be no doubt that the plow of the present day is far superior to those of fifteen or twenty years ago, though no very striking change is visible. Perhaps one of the most valuable improvements, is in the introduction of steel mould-boards, points, &c. The Remington Agricultural Works seem to have taken the initiative in this improvement. Their steel plows are models of beauty, and, what is of far more consequence, they are very strong, though of light weight and easy draft. At a time when we have to pay 75 cents for a cast-iron point (which we have known to wear out in plowing a single acre of dry, hard land,) a steel point, which a blacksmith can sharpen, though its first cost is greater, is certainly cheaper in the end, even if it did no better work.

There is, however, still great improvements to be made in plows. The great fault we have to find with them, is that they are made to take too wide



a furrow. Let us have a good steel plow that will turn a furrow 7 inches deep, and 10 inches wide. Such a furrow slice, laid up at an angle of 45° exposes far more surface to the atmosphere than a broad, flat furrow—and when harrowed down gives the maximum amount of mellow soil.

In Harrows we noticed no improvement. Perhaps little change can be made in the form of a good harrow, but at least they might be constructed so as to be as efficient as possible. The best harrow on the ground, is that made by John E. Morgan of Deerfield, N. Y. It has forty teeth, and is drawn from the center of the harrow, and there is a contrivance for attaching the two harrows together, which allows considerable play, and also at the same time allowing either harrow to rise or fall so as to accommodate itself to the irregularities of the land. This harrow is extensively used in the central portions of the State, but is almost unknown in Western New York.

The Shares Harrow was exhibited by Haines & Pell of New York. Were the shares made of steel, with a little longer shanks, it would add greatly to the effectiveness of this admirable implement.

An improved "Rotary Harrow" was shown by H. H. Monroe & Co., Rockland, Me. It is difficult to describe this harrow without a cut, which we have not space to give at this time.

There were few Rollers on exhibition. Cast-iron rollers, which are far more durable and effective than wooden ones, would seem to have disappeared. When a wooden plank roller sells for \$65, it would seem that cast-iron ones might find customers.

In two-horse Cultivators we saw nothing new. Nearly all of them have the common fault of wide, flat teeth, and of striking the ground too abruptly. They are made rather with a view for cutting up or crushing weeds than for breaking up and pulverizing the soil. The Remington two-horse cultivator comes nearer to our view of what is required than any others we saw on the grounds. If it was made with a set of the narrow Johnston Cultivator steel teeth, increasing their number, so as to stir as much surface as at present, it would be a very effective implement. If necessary three horses might be attached to it. On corn or stubble land plowed in the fall, such a cultivator would prepare the land for barley, or other spring crops quite as well as plowing and harrowing, and in one quarter the time.

In Grain Drills there was nothing new. The Messrs. Brown of Shortsville, and Seymour & Co., of East Bloomfield, exhibited their well known drills. They have a separate attachment for sowing grass and clover seed, and also a drill for plaster and other fertilizers. These drills leave little to be desired. They do the work admirably.

Of corn and bean planters several were shown, but it is impossible to judge of them without a trial. A machine that will *plant* corn in hills, so that it can be cultivated both ways is a valuable machine; but where it is simply *drilled* in, we do not see why an ordinary grain drill will not answer every purpose.

There were two Potato Planters exhibited, one invented by Wm. Nevins of Lyons, and the other by S. A. Aspinwall, of Ireland's Corners. Mr. Nevins' machine is a potato planter, horse hoe, seed drill and potato digger combined. It is rather a potato *drill* than a potato planter. The potatoes are cut into small sets of a single eye each. These are drilled along the row, made by a steel tooth in front of the machine, and covered with two steel mould boards behind. We recently saw a crop of potatoes which were planted and cultivated with this machine, and a cleaner or better crop is seldom seen. In the same field was a crop of corn drilled in and cultivated with this machine, and we never saw a better crop. After all, a good potato digger is of more importance than a potato planter, especially in a season like this, when the crop is light. We know a farmer who is paying a *shilling a bushel* for digging!

We understood that there was a trial of potato diggers near the Fair grounds, but we heard nothing of it till it was over. Mr. Aspinwall's digger was, we believe, adjudged the best. Let us have a good potato digger as soon as possible. In this vicinity, where potatoes are so extensively grown, it would prove invaluable.

We have not space this month to give an account of the many other useful implements and machines exhibited; but shall do so as opportunity offers. In this department the exhibition was unsurpassed. It was the best feature of the Fair. Among the principal exhibitors may be mentioned Wheeler, Melick & Co., of Albany, Westinghouse & Co., Schenectady, R. & M. Harder, Cobleskill, Haines & Pell, New York, J. Nourse, Boston, Remington & Co., Ilion, Herkimer county, N. Y., and Horace L. Emery of Albany. There is probably no more enterprising and intelligent mechanic in the United States than Mr. E., and we are glad to welcome him back again to his old quarters, after his sojourn abroad. May he, and the other gentlemen we have named, continue to give us good implements and machines, well made and at reasonable prices.

TO GET RID OF RATS.—The *Sorgo Journal* says the best way to get rid of rats is to shoot them occasionally with small shot—not to kill but merely to wound. This will intimidate and frighten the whole drove. Repeat the leaden pills as often as they reappear. We presume this may be effectual, but it appears to us rather a cruel practice.



## DISCUSSIONS AT THE NEW YORK STATE FAIR.

THE subject for discussion on Tuesday evening was "Ought Pastures for the Dairy to be kept permanently in grass, or to be renewed by plowing and re-seeding"?

Mr. X. A. Willard, of Herkimer county, opened the discussion. He said the great point with the dairy-men was to produce milk cheaply, and of the best quality.

The dairy region is comparatively small. The land is generally uneven, being broken up in hills and valleys, and supplied with living water, with a moist climate and deep and long-continued snows in winter, which operate to protect the roots of grasses, and favor their growth. On the extensive plains of the West and South-west there is a lack of water and pastures dry up, consequently they are unsuited for dairying.

Confining our attention to the central counties of this State, known as the dairy region, the question is what to do with pasture-lands that begin to fail from over-cropping or from other causes. Shall we plow them up and re-seed or shall we adopt some other mode of renovation? He knew of pastures that had been in grass for over sixty years, which today show no signs of failure, and it is the universal testimony of those who have such pastures that they are yielding better returns in milk than any recently re-seeded grounds.

In 1855 I plowed up an old meadow, about 2 acres of which was yielding large crops of timothy and clover, but so situated in the field that the hay crop could not be got off in time. I took from these two acres the first year 180 bushels of corn, and the second year 100 bushels of barley, when the land was seeded down with timothy and clover. For two or three years it did not produce satisfactorily, though receiving the usual dressing of plaster, and I top-dressed it with stable manure, perhaps 20 loads to the acre, but without getting the large crops of grass that I did before re-seeding. Some mineral element therefore I supposed to be wanting, perhaps potash and soda, and so I top-dressed with ashes and salt, and had no further trouble. I have seen quite a number of old pastures that were yielding tolerably well, plowed with somewhat similar results. The land would bear abundant crops of grain, but grass failed to be enduring, or was less nutritious, and hence frequent plowings and re-seedings were resorted to. I visited Mr. Butler's farm near New Hartford, last year. He buys cattle and fattens them for the market, and he said to me that he had been able to fatten stock with that facility from grass raised on newly seeded grounds as on that of those put down many years ago, or from pastures that had never been broken at all. Many others made similar statements.

When nature furnishes the condition for producing grasses that give the best result in milk, and when these grasses become firmly established in the soil, are we not pursuing a suicidal policy in destroying them by over-cropping, or by sowing weeds to smother and crowd them from the soil, under the impression that our pastures can at any time be renewed by plowing and re-seeding?

Would it not be better and cheaper to exterminate weeds, and give our pastures some rest during the hot dry weather of July and August by feeding sowed corn, instead of cropping down to the roots, and allowing the sun to roast them out and destroy the plants? It is the weeds and over-cropping, and unprotected covering of pasture lands in hot weather, that are the fruitful sources of failure of grass in pastures.

Now it is very unprofitable for the dairyman to break up lands that are yielding, or that can be made to yield readily, good crops of grass. Our most successful dairymen believe that grain can be purchased from abroad cheaper than they can raise it. Grain-raising, therefore, with many is considered a matter of necessity rather than choice, but grass fails, and the lands are plowed and re-seeded. This may be well enough for meadows, but is not so conveniently managed in pastures. If a part of your pasture lands begin to fail, and it is designed to plow and re-seed, the land must be fenced, which is expensive, and often very inconvenient. But after getting it down to grass, cattle can not be turned in until the plants become somewhat established, as they tread up the ground, pull out the grass by the roots, and by mid-summer you have a barren field. Again, to plow pasture lands the herd must be reduced to meet the necessities of the case. This is also an objectionable feature, and one that is distasteful to the dairyman.

When grass *utterly fails*, plowing and re-seeding doubtless should be resorted to; but generally pasture lands may be kept permanently in grass by giving them a little extra care and attention. If they begin to fail from over-cropping or neglect, a judicious course of top-dressing and sowing seed will generally be found preferable to the plow.

Usually on the black slate lands of Herkimer, plaster at the rate of 100 to 200 pounds to the acre, every alternate year, will keep pasture lands in good condition. I have found great benefit from the use of ashes, in connection with plaster, at the rate of two or three barrels per acre. Well decomposed horse manure, hauled out in the fall and broken up fine, and applied when cows are in the after-math, has produced good results. My old pasture contains about 45 acres, and carries one year with another 30 head of cattle and span of horses. I have no doubt but that all the pasture lands in the dairy region would



be greatly benefitted by the application of bones, as this material is largely taken from the soil. Ashes are valuable in eradicating mosses and in furnishing food for grasses, and are worth at least 25 cents a bushel for most of our grass lands. Lime is of great service to some soils. Six years ago I limed an old sidehill meadow, mossed over and not producing. It was applied at the rate of 40 bushels per acre, and the annual crop of grass ever since has been good.

I am inclined to think that good old pastures produce a better quality of milk than those recently re-seeded, and that it would be cheaper and better to renovate by top-dressing than to plow and re-seed. The trouble with the recently re-seeded pastures is the grass early in the season is apt to be rank, watery and more flashy than the thick fine herbage of old pastures. Considerable portions of it often get the start, and soon become woody, and are rejected by stock. A recently re-seeded pasture will not bear cropping like one that is old. The larger varieties of grasses are so rank as to crowd out the smaller and finer grasses, which are the most valuable for the production of milk. The feed in the old pastures springs up earlier and lasts longer than on grounds recently re-seeded. White clover and June or blue grass are valuable for producing milk; they are indigeneous on our dairy soils, and are generally abundant in old pastures, where they seem to thrive best. The character of food which a cow eats has a greater influence on the quality of milk she yields than many imagine.

During the drouth last season, when the cows began to eat the tufts and portions of pastures that had been rejected or left to grow up high and rank, the quality of milk was so depreciated that it took from 12 to 13 pounds of milk, and in some instances more, to make one of cheese. You may, perhaps, get more bulk of grass by plowing and re-seeding, and yet obtain poorer results in milk, than from the old thick sward that has been broken up. One great source of failure and decline of grass in old pastures, is over-stocking. The lands are crowded to their utmost capacity year after year, and receiving scarcely any attention, must of course succumb at last. Again, weeds are allowed to go to seed and get possession of the soil, and where they thus over-run the grounds and destroy the grasses, doubtless the best course to be adopted is to plow and re-seed; but the true course is to pay attention to pasture lands in season, giving them an occasional top-dressing, scarifying the surface in spring, and sowing here and there upon patches that are beginning to fail. As a top-dressing, sawdust in which liquid manures have been absorbed, applied in fall or spring, gives great vigor and growth to grasses. It can be spread over the surface in a finely divided state, and is in condition to be available to plants.

Road scrapings and composts of muck, earth and manures, applied in the fall and pulverized over the surface with a brush harrow, together with the use of ashes, plaster and lime, all of which are available to farmers, will be found of service in keeping up a permanent pasture. And it is believed by taking a few acres annually and treating them with manures, better results will be obtained at less cost than in plowing and re-seeding. I may remark in the use of barnyard manures, fresh cow dung ought not to be used for the dairy, as it produces grass distasteful to dairy stock, and some claim it to be the cause of abortions.

J. Staunton Gould of Columbia Co., could endorse all that Mr. Willard had said. He believed the dairy farmers of this State had sustained great loss by plowing and re-seeding their grass land. Sometimes an apparent increase is obtained, but there are much fewer grasses. In re-seeding we do not sow a sufficient number of varieties to keep up a supply of grass during the season. He mentioned some varieties which he thought might be introduced. The Fox-tail, (*Alopecurus pratensis*), is ten days earlier than any other grass; it gives a good bite early in the season. The next early variety is the orchard grass, (*Dactylis glomerata*), it is earlier than Kentucky blue grass, or what is sometimes called June grass. The objection to it is that it is apt to form tussacks. This may be obviated by the use of a fine tooth harrow and roller. The common Couch grass or Quack (*Triticum repens*), is valuable in pastures wholly devoted to grass.

No matter how thick you sow a single variety of grass, only a certain number of plants will grow in a given space. Sow other varieties and you may fill up the interstices. But you cannot have all the ground fully occupied at all seasons unless in permanent pastures. Grasses are run out by weeds on permanent pastures. Top-dress with rotted manure and mow for a year or two, and it will then form good pasture. Bone dust is a valuable manure on grass land.

Hon. Geo. Geddes of Onondaga, asked Mr. Willard how many acres it took to support a cow through the season?

Mr. Willard—Two acres to a cow.

Mr. Geddes—In the grain regions one acre will support a cow. Statistics show that the wheat-growing farmers keep as much stock per acre as the dairy farmers, and raise grain besides.

John Kelsey of Bucks Co. Pa., said he had an old, run down meadow. He harrowed it thoroughly and sowed timothy seed in October. The next year he had a splendid crop of timothy hay. If the land is free from weeds timothy will cover all the ground. He was in favor of harrowing old meadows, top-dressing and re-seeding.



E. H. Peterson of Seneca Co., was in favor of plowing and cultivating for a few years, and then re-seeding with clover or timothy.

Rev. Mr. Loomis of Herkimer Co., mentioned a pasture of forty acres that had been in grass twenty-eight years. Last June the farmer cut from it two tons of hay per acre. Old pastures will produce more cheese than new, recently plowed and re-seeded pastures.

Mr. Geddes thought an old pasture would give more milk *per cow*, but that new seeded land would carry more stock. He believed in mixed husbandry. We are inclined to run too much to extremes. When land produced such crops of corn and barley as Mr. Willard had stated, he thought dairy farmers should raise all the grain they needed.

Mr. Laird of Utica, thought most depended on the character of the soil. He had farmed in Herkimer Co., and in Michigan and Indiana. In the west you could not keep up the pastures without plowing occasionally and re-seeding.

A. L. Fish of Herkimer, thought that the question of whether land would improve after being plowed and re-seeded, depended on how the land was plowed and cultivated while being cropped. If it was but indifferently cultivated and seeded sparsely, it would not improve; but if the land was well pulverized and manured, and seeded with a variety of grasses, it would be improved. He thought manures should be incorporated with the soil and not put on the surface, especially in winter.

Mr. Arnold of Otsego, was in favor of top-dressing grass land. In his own case it had doubled the amount of butter made on the farm; and this was the experience of his neighbors. Old pastures gave decidedly the best butter.

#### THE BEST TIME TO CUT GRASS.

The discussion on Wednesday evening was "On the best time for cutting grass and the best method of preparing it for hay."

Mr. J. Stanton Gould opened the discussion. He took decided ground against allowing grass to get dead ripe before it was cut. Prof. Way's experiments showed that grass cut just as the plants were going out of flower contained 40 per cent more nutriment than when dead ripe. Was satisfied from his own experience, that it was better to cut grass early. Timothy allowed to get ripe was no better than rye straw. The seeds of hay do not digest in the stomach. Cows dry up when fed on ripe hay.

In regard to making hay, he remarked that the object was to secure as much of the nutriment of the grass as possible. We could not secure the whole. There was a loss in curing and from fermentation, &c. The best way was to allow the grass to wilt as rapidly as possible, by exposing it to the air

and sunshine. Four hours of good sunshine, and it is ready to cock. It should not be exposed to dew while spread out. It washes out the nutriment.

Mr. Van Alstine of Columbia Co., cut his grass in the morning till 11 o'clock. After dinner start the rake and cock up the hay. It was necessary, in the valley of the Hudson, to commence to cock early on account of the dew. Allows the hay to stand in cock one day. Next day open and draw in.

In regard to the time of cutting hay, to be fed out on the farm, there could be but one opinion. It should be cut early. Barley straw is better than over-ripe timothy. But for market it was necessary to let it get riper. It sells better.

Mr. Brewer of Tompkins, raised considerable clover seed, and consequently cut his clover hay early. Thought there was a loss in weight, but a gain in quality. Draws it in rather green. Has poles on the bottom of his bay, so that there is a circulation; puts the hay in loose and it cures nicely. If it is very green, sometimes mixes a little straw with it in stacking. Timothy meadows mowed early and the rowen allowed to rot on the ground will improve greatly.

Mr. Van Alstine, in reply to a question, said he put four lbs. of salt to a ton of hay when cut green. Thought a crop of grass that would make a ton of hay if allowed to get ripe, would give only 15 cwt. if cut green. If allowed to get *over-ripe* it would begin to lose weight again.

Dr. Gill of Poughkeepsie, cuts clover very early, and cocks in an hour in small cocks; draws in next day. Hay cocked green is not hurt by a shower as much as hay cocked dry.

Several gentlemen spoke; all in favor of cutting grass early.

Solon Robinson of New York, was asked Why it was that ripe hay was preferred in the city. He said that the President of the Third Avenue Railroad Co. had studied this subject carefully, and had made experiments with different foods, and had finally concluded that the best and most economical daily ration for a horse was 16 lbs. of corn meal and 14 lbs. of *ripe* timothy hay. The hay was chaffed and moistened with water, and the meal mixed with it. A little salt was added.

In reply to a question, Mr. R. said that the timothy was so ripe that the seeds would grow. In feeding trotting horses, the hay is given them uncut. In the stables where the experiments were made to which he had alluded, over one thousand horses were kept.

Mr. Curtis of Tompkins, cuts his hay early for cows, and feeds that which he cuts last to horses. Timothy cut while in bloom will give the horse the heaves.



Solon Robinson thought that for milch cows hay should be cut early. But for horses one ton of timothy cut when the seed will grow, is worth two tons cut green.

#### CULTURE AND MANAGEMENT OF TOBACCO.

Such was the subject selected for discussion on Thursday evening. Chester Moses of Onondaga, who we believe first introduced the culture of tobacco into that county, gave a full account of the various processes of raising the seed, setting out the plants, topping, suckering, curing, &c.

The discussion which followed Mr. Moses' opening remarks, turned mainly on the influence of tobacco culture on the fertility of the farm.

Solon Robinson gave an account of a crop of tobacco raised on poor, sandy pine-land, near Springfield, Mass. Stable manure from the city was applied freely to the hill, and a heavier crop he never saw in Connecticut, Tennessee, Florida or Virginia. The tobacco plant "needs only a standhold and all the manure you can give it—and a little more." This land could have been bought for \$7.00 per acre, before tobacco was raised on it. The first crop was 1,500 lbs. per acre, and it sold for 30 cents per lb. In reply to a question, he thought this land, even with the same amount of manure, would not have produced 10 bushels of corn per acre.

Mr. Brewer of Tompkins, asked if tobacco exhausted the land as much as was generally supposed. On the Ithaca flats it had been raised for twelve years in succession without manure.

Solon Robinson said in Florida the crop is raised on new land for three years. The tobacco is as good as that raised in Cuba. After the third year, though the crop is fully as heavy, the land is abandoned, because the quality is not as good.

Mr. Geddes said that better tobacco was raised in the Eastern States than in New York, while we raised better than that grown in Ohio and Illinois. The profit of the crop was large. Considerable capital is necessary for the erection of buildings, &c., but when they are once provided a profit of \$100 an acre can be obtained for 20 years. In regard to the influence of tobacco culture on the fertility of the farm, he believed it was a fact that those who raised tobacco on a few acres of their land generally had the most productive farms. They purchased manure from the city for their tobacco crop, and did not impoverish the other part of the farm by raising so much grain as they would be obliged to do did they not raise tobacco. Even when no manure was purchased, he thought that by growing more grass and clover the farm would be kept in as high a state of fertility as if no tobacco was grown. Take for instance a farm of 100 acres. If no tobacco was grown, the farmer would grow grain for immediate

profit. But if he raised 5 acres of tobacco, the other 95 acres might be in pasture, and yet the farm afford as much or more profit as when grain was grown; and it would certainly become richer, even after supplying all the manure that the 5 acres of tobacco required. A field of clover and grass pastured with sheep for three years will be very rich for barley and other grain crops.

#### THE MOST PROFITABLE SHEEP FOR WOOL.

At the Ohio Wool Growers' Convention, held in Columbus during the recent State Fair, a resolution was passed declaring "the Improved American Spanish Merino the most profitable for the wool growers to raise." The following account of the discussion we take from the last number of the *Ohio Farmer*:

Mr. Sears, of Medina, offered a resolution to the effect that the interests of wool growers would be better promoted by encouraging the growth of wool, instead of oil or gum.

Mr. Harris, of Cleveland, moved to amend by saying that such interest will be best promoted by the growth of such fleeces as will yield the most clean wool in proportion to the cost of production.

After some little discussion as to the bearings of these several propositions,

Hon. S. Lahm, of Stark Co., moved that the improved American Spanish Merino, is the most profitable for the wool growers to raise. An excited discussion followed, in which,

Hon. T. C. Jones said that the adoption of such a resolution would be in effect to vote all other sheep out of the catalogue, when it is well known that the mutton breeds are in profitable demand. Some person remarked that we were talking about *wool*, to which Judge Jones replied that we could not raise wool without raising *sheep*. Mr. Lahm thought the most money was in the Merino, and that should determine the question. After further talk which brought out no new ideas on the subject, a vote was taken, and the resolution of Mr. Lahm was declared adopted.

A statement of facts, showing the amount of wool required to produce a hundred pounds of scoured wool, with the price the manufacturers will pay for it, would be far more satisfactory than a dozen resolutions.

ICE HOUSES.—These, when constructed of wood and boards, are severely tested in their durability, by the moisture flowing from the melting ice. Nothing can, therefore, be more effectual in preventing decay than to coat all the timber and boards with gas tar, when they are dry or well seasoned.



### NAILS, NUTS, SCREWS AND BOLTS.

ONE of the component parts of a good farmer is mechanical ingenuity. Some lose half a day's valuable time, for want of knowing how to repair a breakage, which an ingenious person could do in five minutes. A team and two or three men are sometimes stopped a whole day, at a critical season, for want of a little mechanical skill.

It is well for every farmer to have at hand the facilities for repairing. In addition to the more common tools, he should keep a supply of nails of different sizes, screws, bolts, and nuts. Common cut-nails are too brittle for repairing implements, or for other similar purposes. Buy only the very best and anneal them, and they will answer all the ordinary purposes of the best wrought nails. To anneal them, all that is necessary is to heat them red hot in a common fire, and cool gradually. Let them cool, for instance, by remaining in the fire while it burns down and goes out. One such nail, well clinched, will be worth half a dozen unannealed.

Nothing is more common than for a farmer to visit the blacksmith shop to get a broken or lost bolt or rivet inserted, and often a single nut on a bolt. This must be paid for, and much time is lost. By providing a supply of bolts, nuts and rivets, much time and trouble may be saved. They may be purchased wholesale at a low rate.

These should all be kept in shallow boxes, with compartments made for the purpose, furnished with a bow-handle for convenience in carrying them. One box, with half a dozen divisions, may be appropriated to nails of different sizes; and another, with as many compartments, to screws, bolts, rivets, &c.

Every farmer should keep on hand a supply of copper wire, and small pieces of sheet copper or copper straps. Copper wire is better than annealed iron wire; it is almost as flexible as twine, and may be bent and twisted as desired; and it will not rust. Copper straps nailed across or around a fracture or split in any wooden article, will strengthen it in a thorough manner."—*Tucker's Rural Affairs*.

### FARMERS' TOOLS.

A CERTAIN number of tools and some skill in their use, will often save the farmer much time in sending for a mechanic, and some expense in paying him. Every farmer should be able to make small repairs on his wagons, gates, buildings, &c. A room, or a portion of a room, should be devoted to keeping these tools; a pin or nail should be inserted for each one to hang on, and the name of each tool written or painted under the pin, that it may be promptly returned to its place, and any missing one detected. Keep every tool in its place—do not wait for a more convenient season, but return every one to its pin

the moment it is done with. If left out of place a minute, it will be likely to remain a week, and cause a loss of time in looking for it, a hundred times greater than in replacing it promptly. Keeping everything in its place is a habit, costing nothing when formed. The tools should be, a hammer, saw, auger, brace and bits, gimlets, screw driver, wrench, two planes, chisels, mallet, files and rasp, saw-set, trowel, and a box with compartments for different sized nails, screws, nuts, bolts, &c. Common farm implements and tools, such as hoes, spades, shovels, forks, rakes, scythes, &c., may be in the same room, on the opposite side, and the same precautions taken to keep every one in its place.—*Tucker's Rural Affairs*.

### REGULARITY IN FEEDING.

EVERY good farmer knows that any domestic animal is a good clock—that it knows, almost to a minute, when the regular feeding time has arrived. If it has been accustomed to be fed with accuracy at the appointed period, it will not fret till that period arrives; after which it becomes very restless and uneasy till its food comes. If it has been fed irregularly, it will begin to fret when the earliest period arrives. Hence, this fretting may be entirely avoided, by strict punctuality; but it can not be otherwise. The very moment the animal begins to worry, that moment it begins to loose flesh; but the rate of this loss has never been ascertained—it is certainly worthy an investigation—and can be only determined by trying the two modes, punctuality and irregularity, side by side, under similar circumstances, and with the same amount of food, for some weeks or months together.

There is one precaution to be observed in connection with regular feeding, where some judgment is needed. Animals eat more in sharp or frosty, than in warm and damp weather. Hence, if the same amount by weight is given at every feeding, they will not have enough when the weather is cold, and will be surfeited when it is warm and damp. Both of these evils must be avoided, while a little attention and observation will enable the farmer to do it.—*Tucker's Rural Affairs*.

TO PREVENT HORSES KICKING.—Having a horse that would kick every thing to pieces in the stable, that he could reach, and having found a remedy for it, (after trying many things, such as fettering, whipping, hanging chains behind him for him to kick against, &c.,) I send it to you. It is simply fastening a short trace-chain, about two feet long, by a strap, to each hind foot, and let him do his own whipping if he can not stand still without it, and he will not need to have boards nailed to his stall every day.—*Country Gentleman*.



## NOTES FOR SEPTEMBER—BY S. W.

THIS may be truly called the hot September. The mercury has ranged by day from 73° to 94° in the shade up to last evening the 17th. The night of the 14th was the hottest of the season, yet cooler than some of the short July nights of past seasons. In the whole Champaign country, and even on the high lands of Hector up south, pastures have suffered from drouth; yet a farmer writes from Chautauque county that they have had but four days at a time without rain this season. No wonder that every farmer on the high lands there now rides in a spring carriage, as butter and cheese has made them rich.

## HECTOR, SCHUYLER COUNTY.

Crops of both winter and summer grain are as good there as they are in Seneca county, which is saying much—winter wheat often yielding 30 bushels to the acre, and the crops of barley and oats are heavy. Many farmers were busy seeding and preparing their fallows for wheat on the 2d; while others were hauling their barley to Havana and Watkins for sale. T. Carman has a fine farm of 150 acres in the valley of Taghannoc Creek, which *debouches* over the celebrated high falls at Goodwin's Point into Cayuga Lake. Although he got 30 bushels of wheat to the acre, and barley and oats in proportion, he says his most profitable crop was a quarter of an acre of corn drilled in for soiling his milch cows; it was sweeter than Sorghum is of the same size. This little patch kept up the milk of his seven cows, while the cows of some of his neighbors had dried up one half. He has 11 acres of capital long-eared eight-rowed corn, and as *prima facie* evidence that he is a good farmer, he still continues to grow yearly a ten acre field of second crop clover for seed. On this farm the road fence is made of large pine stumps, the roots *enlaid*, permanent and lasting, if not sightly. The sylvia here is a mixture of pines and large deciduous trees. The soil a gravelly loam with small calciferous shale, very rich in all the elements of plant food. Apples are poor and wormy, but pears do well, and some peach trees here were in full but not profuse bearing. Here we attended the Quaker mid-week meeting. Although a silent meeting is a stumbling block to the world, yet mother church confesses to that scripture which says, "The Lord is in his holy temple, let all the earth keep silence before him." And Chas. Lamb has well said, "that for a man to refrain from even good words, and hold his peace, is commendable; but for a multitude it is great mastery."

## SORGHUM GROWING—APPLE AND GRAPE-BRANDY MAKING.

In the south part of Cayuga county we saw large

and continuous patches of Sorghum growing very luxuriantly. A Sorghum mill of large dimensions with the required evaporators is now being prepared in Ledyard to receive the cane from far and near. After crossing the Ferry into Tompkins county at Frog Point, we saw no more patches of Sorghum, but large fields with bountiful crops of ripening Indian corn. Now as we ascended the hill we passed extensive outcropping quarries of calciferous slate; it is here that the large square and beautifully smooth flag stones are obtained for the Lake villages. At the crossing of the Taghannoc is a cider mill and a distillery, with a sign, "Cash paid for apples and grapes." Both were wanted for brandy, as there is only a small excise duty on such spirits.

## PLANT ONE TREE.

Thirty-six years ago I set out in a front yard a stick of weeping willow, *salix tristis*. Last week I took it up by the roots; it measured 40 inches in diameter, cut two saw logs and two cords of fire wood, leaving a cord more in stump and knotty pieces that defied the beetle and wedge. Carlyle says Ireland has miles on miles of festering bog, but not one tree. He advises every Irishman who wants to do something better than dieing for sweet Ireland, to plant one tree.

## POTATOES.

I never had so large a yield of potatoes in so dry a season before. I have heretofore been of opinion that potatoes on rich land, grew more to stalk than to tuber, but I find that after the vines have done growing the tubers have just began to grow. It only takes longer to perfect a crop on a rich than on a poor soil. I have seen some very rotten Mercer potatoes, but all other varieties thus far generally escaped the rot. The equinoxial storm is now upon us, and it may affect the potatoes yet in the ground.

Waterloo, N. Y.

POTATO TOPS.—As I have worked in the potato field for fifty years, I will give you my way of managing the tops. My method has given good satisfaction to others who have practiced it, as well as to myself. My plan is simply to drop them under my feet as I pull them up, and cover them with the dirt that I draw from the hill. Managed in this manner I never have any trouble with them at plowing time. I can learn a boy in fifteen minutes so that he can do it properly, but it is hard learning aged men, for they will cover a few hills, and then, forgetting, will throw them here and there in a slovenly manner. On speaking to them, they reply, "O yes, I forgot." To carry off the tops, or to burn them, is loss of time and property. Farmers, try it this year, but don't "forget."—*Cor. N. E. Farmer.*



## IF I HAD LEISURE.

AN, yes, if you had leisure, what would you do? Why, says the man who is engaged in business, if I had leisure I'd prosecute this charitable object. I'd aid in such and such benevolent plans. I would do a great deal of good, but I am so much engaged that I have not a spare moment to devote to any thing but my business. The man is innocent in the declarations. He really believes what he says. He doesn't know, because he never experienced it, that leisure is the mother of indolence, and that if he had plenty of one he would ninety-nine chances of a hundred have the other in exact proportion. If *I had* leisure says the merchant, I would pay more attention to my accounts and try and collect my debts more punctually—chance if you are not mistaken, friend. If you had leisure, probably you would pay less attention to the matter than you now do. The thing you want is not more leisure but more resolution. The spirit *to do to do more*, my word for it, after all, you waste—actually waste more time than would be necessary to accomplish all you desire. If *I had time*, says a mechanic, I should have my work done in season. The man thinks his time has been all occupied when he was not at work at sunrise—quit work an hour before dark, smoked a cigar after dinner, and spent two hours in the street talking nonsense with an idler. If I had leisure I'd repair that weak place in my fence, said a farmer. He had not leisure, however, and while he was drinking *cider* with a neighbor the cows broke in and destroyed his crop. He found leisure to plant it over. If I had leisure, said my friend the wheelwright, last winter, I'd alter my stove pipe. He did not find leisure though, but when his shop took fire and burnt down he had time to make and build another. If *I had leisure* I'd sometimes go to meeting, old Tom Rattling used to say, but he found so much better business, as he called it, on Sundays, that he never got there. He's dead and gone now, poor soul, but he regretted at his dying day that he had played the cheat upon himself so, and he could but murmur—*too late, too late*. People are very apt to be mistaken in this affair of leisure. There are very few men who put every hour of their time to the best use. Often those who have the least to do don't half do that little, while those who are most engaged do every thing thoroughly. I'll give a plain illustration drawn from every day's experience. If you want any matter, whether of profit or charity, done expeditiously, and well done too, go to not the man who half his time stands or sits with his hands in his breeches pockets, but to the very identical person who being a thorough business-doing man is always at work. That is the man for you. An idler from habit regards everything that requires a

little labor, study or confinement as an ant looks on a *mole hill*—*it seems* a mountain. But an industrious man looks at the labor before him with the eye of a man who is not afraid of it. And here is the secret spring of his ability: he does not loiter or hesitate, he acts promptly, and at once. J. L. HERSEY.

Tuftonborough, N. H.

## THE COTSWOLD AND SOUTH DOWNS.

THE Cotswold sheep will shear from ten to sixteen pounds of combing wool to the fleece, that will not lose more than one-fourth in its preparation for the spindle, well adapted to the manufacture of all kinds of goods for which combing wool is used, and worth more per pound of late than any description of carding wool. The carcass of a Cotswold wether will weigh at two years old, 200 pounds, and be worth more per pound by several cents in any market than a sheep that will weigh from ninety to one hundred and twenty pounds. They are not so hardy as the Southdown or Merino, yet I do not know that they require any more protection, as it is required by all in this State during very bad weather. They cross well with either the Merino or Southdown, adding greatly to both weight of fleece and carcass when crossed on the Merino; while the wool of a half-breed is worth more per pound in the fleece than the wool of a pure-blooded Merino, from the fact that the per cent. lost by cleansing is nothing like so much.

The Southdown sheep will shear, on the average, about eight pounds of wool that will not lose over one-third by cleansing for the cards, worth more per pound in the fleece than any of the fine wools, for this reason—the wool is fine enough for all manufacturing purposes except the very finest descriptions of goods. A two-years-old Southdown wether or buck will shear twelve pounds of wool that will weigh eight pounds when cleansed for the cards; his carcass will weigh from 175 to 200 pounds, gross, worth more per pound than any other breed in this country, or perhaps anywhere else. This breed of sheep is ready for the butcher at any time from two months and a half old to five years, giving as much weight for their feed and age as any other breed, always netting more in proportion to gross weight. The Southdown buck has always been profitably introduced into any flock, improving as he always does, and ever will, in my judgment, every breed upon which he is crossed.—*Cor. Prairie Farmer*.

JOHN JOHNSTON writes the *Genesee Farmer* that sheep fat more rapidly in October and November if they have first-rate pasture, than at any other season of the year. In fattening sheep during the winter it is of special importance that they be in good condition before being put on their winter feed.



# "THE CHEMISTRY OF WOOL AND ITS MANAGEMENT."

PROFESSOR ANDERSON, Chemist to the Highland and Agricultural Society of Scotland, has recently delivered a lecture on the "Chemistry of Wool, and its Management." He said :

In addressing you on the present occasion in the centre of a district in which arable farming scarcely occupies that position of preponderating importance which it does in most places, I have endeavored to select for your consideration a subject bearing more immediately on its staple produce ; and the choice has not been unattended with difficulty, for the agricultural questions with which chemistry has been chiefly occupied are exactly those which bear most directly on the operations of tillage, and least so on those of the sheep farmer. The composition of the soil, and the manures to be applied to it, of the crops it yields, and the feeding stuffs which can be most advantageously employed for the fattening of stock, are the subjects which have come most prominently under the notice of the chemist ; and though they necessarily embrace many matters which must greatly interest the sheep farmer, in common with everyone connected in any way with the practice of agriculture, they do so to a less extent than others bearing more directly on this particular subject. The great majority of the questions which are of most importance to him are of a kind on which chemistry is incapable of throwing light, and with which, indeed, it has no connection of any kind. Even here, however, there are matters on which a knowledge of some chemical facts is not unimportant, and among these I have chosen the chemistry of wool and its management as one likely to possess some interest on the present occasion ; and though I may possibly touch upon matters which may at first sight appear to have no direct application to practice, I am satisfied that further consideration will show that they are far from unimportant. For it can not be doubted that those who feel an intelligent interest in their profession will seek to know everything connected with it, being well assured that there is no fact which may not at some time or other come to possess a direct bearing on it. The subject I have selected for consideration, taken in its broadest aspect, is one of great extent, and might, in fact, be made to include the entire management of the sheep ; for the production of a good crop of wool of the highest quality involves the nicest attention to the breed of the animal and its perfect health. But these, and especially the former, are matters which do not come within the province of chemistry, and can not, therefore, be discussed here. Neither is it always possible to explain by analysis the cause of the difference in quality of different

kinds of wool, the commercial value of which is due not so much to its composition as to its structure. We shall see presently that there are often differences in the composition of the various kinds of wool, but on the other hand two samples may be chemically undistinguishable from one another, although the experienced wool stapler will set down one as of the highest, and the other of the lowest quality. Even the wool of a single fleece is separated by the manufacturer into many qualities fitted for different purposes, and bearing very different values. The cause of this is rendered obvious when the wool is examined by the microscope, when it is seen that its quality depends partly on the fineness and uniformity of the fibre, and partly on the length of the staple, which fits it for the manufacture of particular fabrics. It is well known that these qualities are greatly affected by the breed and the climate in which the sheep has lived, and it is by attention to the former, that the character of Scotch wool has been so much raised ; while the latter is a difficulty with which our sheep farmers will always have to contend, and which must prevent our wool in general from bringing as high a price as that produced in more favorable localities. The nature of the food supplied to the sheep has, no doubt, a material influence on the quality of the wool, and is a subject which well merits attention. But I do not propose to enter upon the consideration of this question on the present occasion, and that principally because the information regarding it is of the most scanty description ; and I have failed to discover any experiments on the influence of the food on the weight or quality of the fleece. We know generally that the best wool is obtained from animals fed on the richest pastures, but it is not possible to tell how far the superiority is due to the more nutritious character of the grasses, or merely to the more favorable climate. The composition and nutritive value of the cultivated and natural grasses of lowland districts are well known, but there is absolutely no information regarding those which form the bulk of mountain pastures. Many of the species are no doubt the same as those found in the lower districts, and their composition is probably very similar, though others are different, and of their composition we are entirely ignorant. There would, of course, be no difficulty in making analysis of these ; but the information they would convey would be of little use, unless it were coupled with a knowledge of those which the sheep select and avoid. It is probable, indeed, that the higher or lower value of mountain pastures depend not so much on the difference in the nutritive value of the grasses of which they are composed, as in the greater or less abundance of those which are most palatable to the stock—for sheep prefer the



finer grasses, and are only compelled by hunger to consume the coarser species, although they are often just as nutritive as those they select. The influence of an abundant supply of food on the quantity at least of the wool is sufficiently obvious, but it becomes still more striking when we consider what that quantity is, and how active must be the animal functions by which it is produced. To do this, it is necessary to look at the relative weights of the fleece, and the animal which produces it. These vary greatly with the breed, as may be seen from the table here given, which contains those which are most widely distributed in this country:—

LONGWOOLLED.	
Lincolnshire.....	8 to 10 lbs.
Devon.....	9
Leicester.....	7
Blackfaced.....	3
INTERMEDIATE.	
Dorset.....	6
Cheviot.....	5
SHORTWOOLLED.	
Merino.....	6 to 8
Shropshire down.....	7
Southdown.....	3 to 4

Taking all the breeds together, the average weight of a fleece may be set down at 6 lbs., while that of the sheep in the unfattened condition will not exceed 90 or 100 lbs. It thus appears that a sheep produces every year a quantity of wool equal to about a sixteenth of its own weight. Even this, however, does not give a perfect idea of the matter, which can only be obtained by making the comparison between the dry wool and the dry matter of the sheep. Wool in its natural state contains about 16 per cent. of water, and if allowance be made for dirt adhering to it, the weight of actual wool in each fleece is about 5 lbs. But the entire body of the sheep contains about two-thirds of its weight of water, so that if dried up (exclusively of wool) it would weigh only 30 lbs.; and hence it follows that a sheep produces annually, in the shape of dry wool, a quantity of matter equal to about one-sixth of the solid substances contained in its body. These facts are sufficient to show the importance of an abundant supply of nutritive food to support the drain in the system occasioned by the growth of this large quantity of animal matter. When we further consider the delicate organization of the skin, each hair of the wool growing within a little tube of its own, furnished with minute glands, by which it is furnished with a peculiar oily secretion necessary to promote its growth and keep it in a soft and pliant condition, and others by which the perspiration is evolved, and that the growth of the wool depends upon all this complex machinery performing its functions in a perfectly healthy manner, the importance of an exact knowledge of all the conditions affecting them will be sufficiently obvious. Without venturing to discuss the physiological questions connect-

ed with the functions of the skin, I proceed to remark that the chemical composition of the wool is extremely complex. As removed from the animal, it consists of two parts—the wool proper, that is, the fibre which is used by the manufacturer; and the “yolk,” a peculiar substance secreted by the glands of the skin, by which the fibre is moistened and protected. In the process of scouring the wool, which is the first step in its manufacture, the greater part of the yolk is removed by means of water and other agents, the action of which will be afterwards explained, and the fibre obtained in a more or less pure state. By careful treatment, the scientific chemist removes them entirely, and then obtains the pure fibre, which then differs but little from the hair of other animals. We shall consider separately the nature of each of these. The pure wool is of itself a very complex substance. It contains a small quantity of fixed or mineral matters, which are left behind in the ash when it is burnt, and this contains a comparatively large quantity of silica, a substance found in extremely limited quantity in the animal body. Setting aside these substances, the wool consists of—

Carbon .....	50.65
Hydrogen.....	7.02
Nitrogen.....	17.71
Sulphur .....	2.31
Oxygen.....	22.31
100.00	

In composition, therefore, it does not materially differ from the nitrogenous constituents of other parts of the animal body. It is as rich in nitrogen as the gelatine of the bones, and surpasses every other animal substance in proportion to the sulphur it contains. The state in which this sulphur exists in it is peculiar. A very distinguished French chemist, M. Chevreul, supposed that it might be removed from it without injuring the quality of the fibre; but more recent experiments have disproved this view. But they show that a portion can be easily extracted, although the remainder resists all agents, except those which completely destroy the fibre. So feebly is part of the sulphur retained, that it is actually expelled when the wool is boiled with water, and even slowly escapes at ordinary temperatures; and this is the reason why metallic, especially silver, articles become black on the surface when left for a long time in contact with it. A portion of the sulphur can be easily removed by alkalies, but a part resists their action, and from this difference in the condition in which it is present it is not improbable that the fibre of wool is composed of two different compounds, but chemists have not yet succeeded in devising a method by which they can be separated. This opinion derives support from the fact that the quantity of sulphur varies in different samples of wool, and appears to depend in some way on its quality. It has been found to vary from 3.4 per



cent. down to 1.89, and one observer has even found as little as 0.89, although this result appears to be doubtful. The largest proportion (3.4 per cent.) was found in the wool of a particular breed which feeds on moorlands in Germany, and which is extremely coarse and inferior in quality, while the lowest was found a particularly fine wool. The quantity in ordinary wools is about 2.5 per cent., and from that to 2 per cent. was found in several samples of English wool, though the experimenter unfortunately omits to specify the breeds. The "yolk," as it is called, which is mixed with the wool proper in the fleece, is still more complicated in its composition, and is a mixture of a variety of substances secreted by the oil and sweat glands of the skin. The proportion found in the fleece varies greatly, sometimes amounting to nearly half the entire weight of the fleece, though in general it does not exceed 25 per cent. In one instance examined by Chevreul the wool contained only 31 per cent. of pure fibre, but the loss in this case included 26 per cent. of earthy matter adhering to the fleece; but even including dirt, the quantity rarely exceeds half the weight. It appears that the yolk is largest in the finer varieties of wool, but upon this point there appears to be considerable room for further inquiry. The chemical nature of the yolk was first examined in the end of the last century by Vanquelin. Before his time it had usually been considered of a fatty nature, but he showed that it was principally composed of a soap containing potash as its base, some carbonate of potash, small quantities of some other salts of potash, and an animal matter. More recently Chevreul examined the yolk, and found it to contain, in addition to these substances, two peculiar substances of a fatty nature, but differing from ordinary fats in being incapable of forming soaps with the alkalies, but which have not been more particularly studied since his time. When wool is immersed in water, a portion of the yolk, consisting of the matters exuded by the glands, rapidly dissolves, and the matter so taken up is rich in potash, and has to some extent the qualities of soap. As this accumulates in the water it acquires a powerful detergent property, and causes the fatty matters of the wool, which are themselves insoluble in water, to enter into solution. In this way Chevreul found that 32 per cent. of the wool entered into solution, but it retained  $8\frac{1}{2}$  per cent. of fat, which could only be extracted from it by spirits of wine or by alkalies. These substances are removed from the wool in the process of scouring, first by the use of water, and afterwards by means of an ammoniacal solution. Formerly urine allowed to putrify until ammonia was produced in it was employed for this purpose; but the facility of obtaining the pure alkali has led to its being substituted, and in some cases soap is also used. The nature of the so-

luble matters of wool has undergone a further examination within the last two years by two Frenchmen, named Maumene and Rogelet, who have founded upon it an interesting branch of manufacture peculiarly worthy of the attention of the farmer, because it gives him some indication of what sleep are receiving from the soil. According to their observations, average wool, when washed with water, yields to it 15 per cent. of its weight of yolk, composed of a particular animal acid in union with potash, of which it contains about 33 per cent. According to this calculation, a fleece weighing 6 lbs. must contain about 5 ounces of potash which are for ever removed from the soil and have hitherto been entirely lost. MM. Maumene and Rogelet, however, recover this, and their process is in actual operation in some of the great centres of the woollen manufactures of France, and is in all respects a most interesting and important one. They buy from the woollen manufacturers the yolk obtained in their process of washing, according to a carefully graduated scale, giving for that extracted from a ton of wool about 15s. if it be diffused through 69 gallons of water, and only 4s. 5d. if contained in 600 gallons, and at proportionate rates for intermediate degrees of concentration, the different prices paid for the same article in different degrees of dilution depending on the increased cost of recovering the potash from the more dilute fluids. By this means the manufacturers are induced to adopt a systematic mode of washing the wool so as to use the minimum amount of water. These fluids are then evaporated to dryness, and the residue introduced into iron retorts, where it is calcined, gas (which can be used for illuminating purposes) and ammonia being driven off, and the potash left behind in the form of carbonate. The quantity of potash which might be thus recovered from the wool is very large. MM. Maumene and Rogelet state that there are 47,000,000 sheep in France, and from their wool, if it were all carefully washed, there would be obtained annually 11,700 tons of carbonate of potash, worth about £350,000, which is sufficient to supply the entire demand for that substance in that country. In Britain the figures are still higher. There are supposed to be 55,000,000 sheep in the United Kingdom, and in 1859 we imported the fleeces of about 22,000,000; and if the whole of this wool, both native and imported, were subjected to the process, it would yield upwards of 19,000 tons of carbonate of potash, worth £570,000. Of course it is not practicable to recover the whole of this, for a good deal of wool will always be washed on the small scale, when the potash cannot be profitably recovered, and the operation must therefore be restricted to the great manufacturing centres, where it can be carried on on a large scale, and in a continuous manner. The matter, however, is not on



that account the less important to the farmer, for the rise of an industry of this kind brings forcibly before him the extent to which valuable substances are being removed from the soil. The wool produced in this country carries off annually 14,000 tons of carbonate of potash, equivalent to 9,500 tons of pure potash, all of which is at present entirely lost, and which it would cost nearly £200,000 to replace if the farmer bought it in the market even in its cheapest form. It is to be remembered too that potash is the very substance of which, according to the modern system of manuring, we return the smallest quantity to the soil, so that if at any time our land should show symptoms of exhaustion, it will most probably be due to the deficiency of potash. There seems no good reason why the farmer, though he cannot recover the potash in a pure state, should not wash wool in a systematic manner, and apply the fluid as a liquid manure to the soil. Although the yolk must be considered as a refuse matter, its presence has an important influence on the quality of the fleece. When it is deficient the wool becomes harsh, more or less brittle, and unfitted for the manufacture of the finer fabrics. A proper supply of it must therefore be of much importance, and can only be maintained by attending to the health of the animal.

WEEDS.—J. J. Thomas, in *Rural Affairs*, says: "The yearly loss to the farmers of the United States, occasioned by weeds, amounts to many millions of dollars—enough probably to build an Erie or New-York Central Railroad, dig an Erie Canal, or build and endow one hundred first-class agricultural colleges. With many land-owners, one-fourth part of the corn crops is consumed by pig-weeds, fox-tail, and other intruders, and an equal proportion of meadow and pasture land occupied with malleins and thistles, johnswort and brier bushes. With others the loss is still greater, while a few good managers loose little or nothing. Admitting it to be but a tenth part as an average, what is the result? The aggregate value of all the crops of the country, is doubtless at least eight hundred million dollars yearly, and but a tenth part of this is *eighty millions*—a sum far exceeding the estimate just offered, and enough to make the two great railroads and the Erie canal combined."

THE HOP CROP.—The *Albany Journal* says the "lice" have played the mischief with the hops in Otsego county. In many sections the crop will not be more than one-fourth the average. Large yields on the line of the Susquehanna railroad are entirely destroyed by the devastating insect, the vines looking wilted, and the leaves having a black and blasted appearance.

## WHO SHALL ADDRESS OUR AGRICULTURAL FAIRS?

A CORRESPONDENT of the *Country Gentleman* discusses this question as follows:

"It has long been the custom at the annual gatherings of Agricultural and other societies, to have an address delivered touching the object of the society or association. All the different societies for the advancement of knowledge, literature, mechanic arts, science, history, law, medicines, and divinity, select some one to give an address at their annual meeting, pertinent to the object of the society, on some subject of practical importance to its auditors. This is very benefiting, and generally develops something new or useful on whatever subject they may treat. All these organizations generally select one of their profession to deliver the annual address. This is as it should be, for one of their own profession is better qualified to interest them, than one of another profession or calling. He knows the history and objects of the society better than one whose thoughts have been trained to other intellectual developments. These annual meetings have been productive of an incalculable amount of good, and have awakened an interest that nothing else would. How is it with the agricultural societies? Are they addressed by one of their members? It is a lamentable fact that a majority of the addresses at Agricultural Fairs are given by those belonging to 'the learned professions.' This should not be so. There ought to be farmers within the bounds of every society capable of giving the annual addresses. They may not be in command of elegant language, or able to make rhetorical flourish in beautifully turned periods; but they may do what is of more importance, give an address embodying sound practical views in all that pertains to progress in agriculture. It would be looked upon with surprise to see a farmer addressing a society for promoting the interest of law, medicine, or divinity, but just as appropriate as it is for men who have never held a plow, or swung a scythe, or performed the simplest duties of agriculture, to attempt to instruct men who have grown grey in the pursuit of agriculture, as to the best method of cultivating our farms, what crops are adapted to our soil and climate, what leading staple is most profitable, or what breeds of stock are best adapted to the different branches of agriculture. These are important questions, and none but those of large practical experience can answer them to our profit."

REMARKS.—We doubt very much whether a good practical farmer would, as a general rule, prove as acceptable to the great mass of Fair-goers, as such men as Horace Greeley, Henry Ward Beecher, Solon Robinson, and many others, who, though not practical farmers, nevertheless take an interest in all



that pertains to agriculture and horticulture, and are able to say many good things in a way likely to be remembered. The place for the good practical farmer to communicate his experience to his brother farmers is not in the open air, to a promiscuous crowd, at our Annual Fairs, but through the agricultural press, and, if he has the faculty of talking, in delivering a short lecture on some practical subject, in a comfortable room during the winter evenings, to be followed by a discussion. Such lectures, under the auspices of our County Agricultural Societies, would prove of universal benefit.—Eds. G. F.

#### A WORD TO "COUNTRY BOYS."

OUR young men in the country are sadly in want of more pride, not in their dress, but in the appearance of their horses and wagons. They, when *a la mode* make their appearance in the streets in "turn-outs" that they ought to be ashamed of. Their horses, harnesses and wagons are, as animals and vehicles, better than they deserve; for with few exceptions, they are kept after the notions of slovens. Because, their horses are thin in flesh, have to work hard or not well mated, they will pay no attention to the looks of their coats, manes and tails, and as their harness is old and their wagons heavy and awkward, they will sleep on in their slackness, never trying to fix them up. If we were to let these young men have their choice in horses and wagons, they would not have them long before they would look just as bad as the old ones. Wagons and harness, as well as horses need constant care—but when the attention is bestowed daily they demand but little at any one time. Some of these long evenings give those road harnesses, both heavy and light, a thorough washing with castile soap suds. Allow a coat of suds to remain after washing. The harness need not be taken apart to wash. In the morning give the prominent parts a good rubbing, and always, before using on the road, rub the saddles and blinders with a damp cloth, this gives a smooth surface, and prevents the dust from forming a thick coat on it. The terrets and bits, if plated, scour, if not, give a coat of common black paint. The time for oiling, is late in the fall after the dust is through with. Now, supposing all parts to be in repair; for ornament buy four wooden brass-lined rings, four spreaders, (two-thirds as long and heavy as hame straps,) and a good set of snaps. Buckle two in the bits to snap the side lines in, and put two on the inside hame to pass the lines through; regulate the spread of your team by the out-side line. On a smooth, wide track a team will look better and work as easily to be well spread, but on a narrow track have them near the pole. Some short pieces of red tape or dress braid will make the bridles look

well, tie them on each end of the front piece. Tie straps, used with a carriage or democrat, should be carried in the vehicle, with a large wagon or on the farm, fold them in a skein eighteen inches long and snap in the line ring on the out-side hame, or snap in the ring and tie half way from the saddle to crupper.

After cleaning your horses, card carefully their manes and tails, by doing it regularly you will not pull out the hair. Just before putting on the harness, wipe the team with a cloth, a little dampened; this is an important part of cleaning, as it gives the hair a clean look and keeps the harness clean. Some Saturday evening give your neck-yoke, evener, and whiffle-trees a coat of red paint. Eveners and neck-yokes are usually too short for wagon use, much longer ones are required for wagons than for sleighs. Take some square pieces of cow-hide and cut some washers for your wheels. Our rattling lumber wagons are a nuisance, and with the help of washers, hammer and wrench, can be made to run as quietly as a carriage. With a little trouble you can make a board spring seat, or for little money buy some steel springs which are better.

Much can be said about needed improvements in keeping and driving horses, which I will leave until another time.

OLD MAN.

North Chili, Sept. 5th, 1865.

MAKING CIDER.—In a speech on cider-making, before the Ohio Pomological Society, Mr. Ragan said he considered it absolutely essential that the apples intended for cider should be sound. Cloths should be used in pressing, to prevent the accumulation of pommies, as this is a great cause of fermentation. The apples should stand about thirty-six hours before being pressed, and will be sweeter when made in this way. He considers it important that no air be allowed to get to the cider when being drawn off. A Mr. Fisher thought it a bad plan to grind apples with a cast iron mill. He would also have the apples pressed very soon after being ground, as otherwise the apples would become bitter.—*N. Y. Times*.

EARLY MILKING.—Cows should be milked early in the morning so that they can feed on the dewy grass. Two hours of such feed is worth as much as that of the rest of the day towards giving a good flow of milk. So wake up boys at father's rap on the partition wall, and hie to the yard with pail in hand, and have the cows in pasture before anybody's else. Be sure and milk clean. A boy who will always milk clean will have a good recommendation of being faithful wherever he goes, and such a recommendation always goes a great way among business men.—*Maine Farmer*





## GARDEN WORK FOR OCTOBER.

I PROPOSE to say a few words upon picking, handling, and marketing fruit. Of late years, the fruit crop is so uncertain, so likely to be a *short crop*, that it is a matter of no little importance to understand how to make the most possible of what little grows.

*Windfalls.*—Before the fruit is fully matured on the tree, quite a proportion will generally drop off, either from the operations of worms in the fruit, or from undue exposure to winds. Where apples have nearly attained their ordinary size before falling, they are of considerable value for feeding swine, are good for making *vinegar*, and the better class will generally sell at the groceries for cooking apples. My plan is to gather them soon after they fall, select the best for market, and put the balance in the cider-house, where I keep a hand cider-mill—and on rainy days make them into cider.

Sound fruit should be left on the tree until fully grown. If you have a *home market* for your fruit, you should not pick it until it begins to soften. If to be shipped within a distance of 24 or 30 hours, it may still be left on the tree until just ready to soften—if properly picked and handled. Fruit enlarges rapidly during the last stages of maturing. I was offered, the latter part of July, \$4.00 per barrel for my Sweet Bough apples, if I would pick them immediately. I declined the offer—waited about ten days—and then picked and sold them for \$3.50 a barrel, making, I doubt not, 50 per cent. by allowing them to mature, as they were nearly twice as large.

It rarely happens that all the fruit on a tree is ready to pick at the same time. In such a case it will pay, if you have convenient ladders, to pick the ripest, and leave the balance on until they have attained their full size. In picking a tree I have frequently left some on because they were too small for market. Two weeks later they were larger than any I had picked.

*Handling of Fruit.*—All fruit should be carefully handled—never *dropped* into a basket, or poured into a barrel, and generally handled more like eggs than stones. The same fruit carefully handled

through all stages, will sell for nearly twice as much as it would if roughly handled.

Need I say to farmers, in barreling your fruit for market—be honorable—be honest. Never put fair fruit at both ends of the barrel, and miserable cullens in the middle. Such a cheat casts a stigma on the name of farmer. Time was when *honest* usually preceded farmer. But now speak of the honest farmer and there are those who will sneer at the appellation, and call up the barrels of apples they have bought—fair on the outside—foul within—the tubs of butter—sweet on top—frowy in the middle—cords of wood, cobbled up from two-thirds of a cord, and so on through the whole list of petty, contemptible tricks. Agricultural papers, and agricultural societies should take up the subject, and anathematize those guilty of such practices.

Fruit dealers should always require farmers to brand their name on a barrel of fruit before buying it, and then when such a cheat is detected, it could be traced back to the guilty author, and then his name should be passed round among dealers, that they might beware of him.

*Fruit Stealing.*—Farmers should unite their efforts in the attempt to put down this practice. Few things are more aggravating to a man, than after he has spent years in planting and training up a tree, to have its fruit stolen by some miserable, prowling vagabond—too lazy to raise fruit for himself. We should demand of our legislators the passage of more stringent laws for the protection of fruit. Most other property we can put under lock and key, but fruit, while growing, must necessarily be exposed to the depredations of cowardly thieves, who should have *special* protection.

The gardener will not find his labors very *pressing* in October, yet he need not be idle. The warm, growing weather of September has started the weeds among the onions, spinach, strawberries, &c. They should be subjected to one more grand assault before going into winter quarters.

Asparagus should be cut down, raked off the bed, and a good top-dressing of fine manure applied.

Beets should be dug—their tops cut off, and then packed in boxes or barrels mixed with dirt in the cellar.

Carrots should be gathered the latter part of the month, and preserved the same as beets.

Parsneps, such as are wanted for use in winter, should be dug, and treated the same as beets.

Turnips are better to remain in the ground as long as possible, and avoid hard freezing. P. C. R.

In writing on wooden labels or marking sticks, with a common pencil, if the wood is first wet, the mark will last two years; if written on dry, one or two rains will wash it all away,



## THE CATAWISSA RASPBERRY.

THE editor of the *Genesee Farmer* possesses a good practical mind, and furnishes much valuable information upon many important subjects connected with agriculture and horticulture. We frequently copy from his columns. Hence we were not a little surprised to find the following in one of his late numbers :

"The Catawissa Raspberry is chiefly valuable for its hardiness. Throughout the New-England States, as in this section, all the better varieties of raspberries require protection in winter; the Catawissa does not. Whether the others are not enough better in quality to compensate for the labor required to bend down the canes and throw a spadeful of soil on the ends is a question of taste. As a rule those things requiring the least labor are the least valuable."

We fancy that our cotemporary has but little knowledge of this berry, otherwise such an opinion could not have been printed. To say that the "Catawissa is chiefly valuable for its hardiness," is to say that a horse is chiefly valuable for its exemption from sickness or lameness.

Now, we claim to have as much experience with the Catawissa raspberry as nearly any other person. Shortly after its discovery in the old Quaker burying-ground at the town of Catawissa, Col. Paxton sent us a cane from the original stock, and we have been cultivating it ever since with the greatest success. We find it valuable for its excellent quality, in the which that it possesses the true raspberry flavor; we find it valuable for its productiveness; and we especially regard it as valuable for its *second crop* of fruit, which ordinarily begins to ripen upon the *new wood* from the 10th to the 15th of August, and continues to furnish a constant supply until and generally throughout October. In 1863 we had upon our table a dish of the fruit on the *eleventh day of November!*—The vines indeed continue to bear until checked by a sharp black frost.

The cane is hardy, but we do not put it to the test of exposure. It is well-known, but is not so stated by our cotemporary, that it bears *two crops* a season—one (the first) upon the preceding year's wood, and the other upon the new wood. But we do not trench so much upon its strength, besides we have plenty of others at the first ripening. We therefore reserve the whole strength of the stool for the second crop, which matures at a time when there is really no other producing any quantity to take its place, and it furnishes a supply for from *eight to ten weeks!*

In the latter part of November the entire canes are cut down to the ground and covered with manure, and nothing more is done with them. And in this way they have gone on bearing for some six or seven years, never failing to yield a satisfactory, and

we will add a gratifying crop of fall fruit, without the least symptoms of a diminution in the vigor of the roots.

So far as in our power we have distributed canes to our friends, and there is not one of them but who is delighted with the berry, both as to its quality and season of production. It is true the variety may behave differently out in the region where our cotemporary flourishes; but here, and so far as we know everywhere, the Catawissa is most welcome in its autumnal visitation.—*Germantown Telegraph*.

We publish the above without comment; first, because we have had but little experience with this variety of raspberry; and second, because the editor of the *Germantown Telegraph* is well acquainted with it and is excellent authority on the subject.—  
EDS. G. F.

## PRUNING THE GRAPE.

DR. WARDER, of Cincinnati, where, as our readers know, the grape is trained on stakes, gives the following short summary of the main points in January:

"Trim when the vines are dormant, but not frozen; remove all redundant wood leaving only so much for fruit as the strength of the vine will enable it to ripen, but avoid such severity of pruning as will force an excessive wood growth

"So soon as the young shoots have attained the length of a few inches, remove all the redundant growths and all the ground suckers. Before blossoming, pinch the ends of all very strong fruit branches that spring from the bow, to control them, to make better foliage, and new leaves on the laterals that are thus forced out, and to encourage the vigorous growth of the canes that spring from the spurs, and which should be tied up from time to time, and relieved of their laterals till they reach the top of the stake, after which they may be allowed to grow at random, or may be trained horizontally from stake to stake."

## CULTIVATION OF ORCHARDS—PRUNING IN JUNE.

—*Eds. Genesee Farmer*:—I would like to know more about the cultivation of orchards. While trees are young I know it is decidedly better to cultivate them, but the question is after the first ten years is it better?

I pruned some apple trees in May and June last year according to the views of one of your correspondents in last year's *Farmer*, and they are very beautiful. The wounds are healed, and the bark looks of a yellowish green. The trees look very thrifty. It may not be best to cut large limbs at that period of the year. I pruned some more trees at the same time this year.—A. G. MULLINS, Lawrenceburg, Anderson county, Ky.



## FRUIT GROWERS' SOCIETY OF WESTERN NEW YORK.

THIS Society held its autumn session in this city on the 21st ult.

A Committee appointed to examine the fruits on exhibition, submitted the following:

The Committee on the Examination of Fruits beg leave to report:

**PEARS.**—Messrs. Ellwanger & Barry exhibit 160 varieties of very fine specimens of Pears. Among the new varieties the Committee think highly of the Edmonds as a highly flavored table Pear. Also, twelve varieties of extra fine specimens.

**GRAPES.**—Messrs. Ellwanger & Barry exhibit 25 varieties of Grapes. Among their very fine samples, the Committee found specimens of Delawares, of high flavor, and well filled bunches. They also noticed a seedling of their production, known as No. 19, a seedling from the Delaware. The committee would place it in quality with the best new varieties. They also had a large display of Rogers' Hybrids.

Frost & Co. exhibited 14 varieties of grapes, among which are fine specimens of the Rebecca.

Godfrey Zimmerman, of Buffalo, had on exhibition seven varieties of grapes, among which the Committee find very well ripened and fine specimens of Dianan, Delawares and Concords—the latter the best on exhibition.

J. W. Clark, of Naples, exhibited unusually fine specimens of Isabella and Catawbas, well ripened and large clusters—the best on exhibition.

F. W. Little exhibited six varieties of well ripened grapes.

J. Smith, of Le Roy, presented six varieties of well-ripened grapes, among which the Committee find the best ripened Dianan on exhibition.

Bronson, Graves & Selover of Geneva, presented a seedling claimed to be earlier than the Hartford Prolific, and equally as good.

Moore Brothers, of Brighton, had on exhibition six varieties of their own production. Among these the Committee would mention a cross of the Diana and Black Hamburg, of excellent flavor known as the Diana Hamburg—large-sized berry and large clusters. The Committee would place it high on the list of new varieties.

P. Bennett exhibited six varieties—fine samples.

J. Keetch, of Waterloo, had on exhibition ten varieties, among which were fine specimens of Annas.

C. W. Seelye exhibited ten specimens of grapes, among which was a fine sample of Maatawneys, and the largest clusters of Dianan on exhibition.

P. C. Reynolds exhibited six varieties of pears of good quality.

The Committee would report, in conclusion, that the exhibition of pears and grapes was very fine and highly creditable to the exhibitors. If they should

take the liberty of specifying any variety of grapes for general cultivation, they would designate the Delaware.

H. H. OLMSTED.  
E. D. HERENDEEN,  
B. SPENCE.

The following questions were submitted for discussion and occupied the attention of the Society during the session.

## QUESTIONS.

1. Cause and Cure of Mildew of the Grape?
2. Best Varieties of Grape for Packing and Shipping?
3. The most promising of the New Varieties of Grapes?
4. What distance apart ought Grape Vines to be planted in Vineyards?
5. Is side hills or level grounds most desirable for Vineyards?
6. What soils are best adapted for growing Grapes for table use? What for Wine?
7. What varieties of Pears have proved this year to be the most profitable for market?
8. What varieties of Pears have proved to be most exempt from the Black Fungus, and what varieties most subject to this malady?
9. What varieties of Apples are proving the most profitable this year for market?

As to the first question there seemed to be an agreement among the speakers that the exciting cause of the mildew was the extensive wet of the spring and early summer—that the disease was aggravated by over crowding vines with wood and foliage by too close planting, shade of trees and proximity to buildings.

The remedy most strongly urged was the free circulation of air and light. Some speakers mentioned the use of *sulphur, sulphur and lime* and salt strewn on the ground under the vines, all with more or less benefit.

The fact however was apparent that the fruit growers of this section have had so little experience with grape mildew that they know very little of the best methods of treating it.

**QUESTION 2.**—Best Varieties of Grapes for Packing and Shipping.

Mr. Craine, of Lockport.—The *poorest* for this purpose was the Concord. Isabella and Diana are good. He thought well of Rogers, 4, 19 and 15.

Hartford Prolific does well if sent in small cases so as to sell without dividing.

Mr. Little said the objection to Concord was partially overcome by allowing them to wilt.

Mr. Clark, of Naples, followed this plan with the Isabella, and thought that if the Concord were treated in the same way there would be no trouble with its cracking.



Mr. Babcock, of Lockport, said the Concord is too tender for shipment—the grapes crack badly even in picking from the vines—this wilting will not cure it. There is no difficulty in shipping the Delaware—have sent it to Chicago and New York. Isabella, Diana and Hartford Prolific are good shipping varieties.

H. E. Hooker thought the period of ripening should be taken into consideration—the Isabella ripens after the hot weather, and for this reason may be a good shipping grape.

QUESTION 3.—The most promising of the New Varieties of grapes.

By new varieties was understood those that had been introduced since the Delaware, Diana, Concord and Hartford Prolific.

#### CREVELING.

Mr. Barry was very much pleased with the Creveling—one of the best early black grapes.

Hooker.—It hangs well to the vine, even until frost.

Bronson, of Geneva.—Have never seen leaf blight upon the vine.

Mr. Clark.—Had seen it at Hammondsport, and thought well of it.

Barry.—It is very prolific.

Mr. Little.—Each year the bunches get more compact—think well of it.

Hooker.—Had been informed by Germans that it was the best native wine grape.

#### IONA.

Bronson.—Had seen it at several places in Geneva—it proved earlier than Delaware, and Mr. Downing had informed him of the same fact—it is a rich, sweet, early grape, free from disease of any kind.

#### ADIRONDAC.

Seelye.—Had seen this grape in Albany, August 18th—well colored, and apparently, sufficiently ripe for use—saw it also on the grounds of a gentleman in the suburbs of this city quite ripe, September 1st. It is a strong grower, and very prolific, and the earliest good grape we have.

Dr. Beadle.—One of his neighbors had fruited it—it was perfectly ripe September 1st.

Benj. Fish.—A gentleman at the State Fair who had grown it, stated that it had mildewed worse than any other.

Hooker.—Saw it in bearing in this city—some fifty bunches on a small vine—greatly over-cropped—was mildewed some, but it was in a bad place, where Isabella and everything else except Delaware was spoiled by mildew.

#### ROGERS.

Mr. Craine—thought most of Nos. 4, 15, 19 and 39. No. 15 in particular is a very fine grape—no pulp, sweet to the center and very rich.

Hooker.—Nos. 4 and 15 gave good satisfaction to Germans here.

#### ISRAELLA.

Bronson.—It is very promising—has close compact bunches, hangs well, good in quality, and earlier than Hartford Prolific.

#### REBECCA.

Bronson.—Very fine, our finest white grape.

#### MAXATAWNEY.

Seelye.—An excellent light-colored sweet grape, strong grower, abundant bearer, hardy and of a quality that pleases every one—it is a sort that will be highly esteemed when more known.

QUESTION 4.—What distance apart ought grape vines to be planted in vineyards?

Upon this question there was much diversity of opinion.

Mr. Craine for trellises planted Delaware 5 by 9 feet.

Mr. Thomas stated that Mr. Farley planted 8 by 12.

Mr. Clark, of Naples, planted Isabella 15 feet each way.

Mr. Hooker was in favor of plenty of room.

Dr. Beadle—liked a wide distance as it allows the sun to reach the earth, and keep it in good condition.

In all these opinions there was very little light thrown upon the question—the distance of planting depends so entirely upon the method of pruning practiced that it is impossible to state a distance for any practicable purpose without at the same time indicating the method to which it is adapted—this in no case was given and of course the conversation on this point leaves us without a conclusion.

The question is still open—it is a very important one to those just about to plant vineyards, and we do not think there is information sufficient now on hand to enable a correct opinion to be formed. The general principle that governs in this case is that the quantity of wood and foliage in any given case bears a constant ratio to the quantity of roots—that the quantity of wood and foliage depends upon the roots and *inversely* that the quantity of roots depends upon the quantity of foliage.

The fact is that vines by being planted at wide distances may be grown to a large size, and maintained in health for a long period of years—it is also equally as well proven a fact that they may be planted quite closely and confined to a very small size comparatively and remain in vigorous condition—either plan may be pursued with good results, but which will produce the best is the point to be decided on, and requires a thorough investigation, with all the conditions and circumstances considered.

QUESTION 5.—Are side hills or level grounds most desirable for Vineyards?



Dr. Dake—received last season at the rate of \$1200 per acre on level ground, and \$900 on hill side, the soil of both being about the same—a clay sub-soil and sandy surface.

J. H. Babcock, of Lockport, preferred hill-sides on account of better circulation of air.

H. N. Langworthy—thought well of side-hills.

Barry—said that side-hills could be profitably occupied for vineyards, which could not be so well used for other purposes.

QUESTION 6.—What soils are best adapted for growing grapes for table use? What for wine?

Moody—thought that clay soil drained, was best for wine purposes—juice is stronger.

Dr. Morse—procured the heaviest crops and richest wine from clay soil—thought a good heavy soil best for the grape, either for the table or for wine purposes.

QUESTION 7.—What varieties of Pears have proved this year to be most profitable for market?

The following sorts were most favorably spoken of: Bartlett, Flemish Beauty, Howell, Duchesse d'Angouleme, Beurre Diel, Sheldon, Louise Bonne de Jersey, Doyenne d'Ete, Seckel.

QUESTION 8.—What varieties have proved to be the most exempt from the black fungus, and what varieties most subject to this malady?

The varieties that have suffered most were stated to be White Doyenne, Seckel, Flemish Beauty.

QUESTION 9.—What varieties of Apple are proving the most profitable this year for market?

The following sorts were most favorably spoken of: Roxbury Russet, Rhode Island Greening, Baldwin, Northern Spy, Twenty Ounce, Tompkin's Cooking, Golden Russet.

EVERGREENS ON THE PRAIRIES.—This subject was discussed at a recent meeting of the Illinois Horticultural Society. Dr. Warder, of Cincinnati, spoke highly of the red cedar. It makes good screens and can be easily grown. Gather the seed any time after October. Then put it in a vessel of water and keep it in a place sufficiently warm to induce fermentation, so as to destroy the resinous coating of the seed. It should then be rubbed off and the seed put in sand, if designed to keep till spring for planting. It should be allowed to freeze while in the sand.

Several members thought the red cedar much preferred to the white cedar or arbor vitæ for screens on the prairie. In this section the latter is usually preferred.

FOR Unfruitful Gooseberries, prune freely in the fall, cutting out old wood and shortening the new. An old bush may be cut back one half to advantage. If still inclined to wood without fruiting, pinch in the summer growth.

## ORCHARD CATERPILLAR.

THE vast numbers of these caterpillars in many parts of the country admonish orchardists to destroy them before they make such progress again as they have the present year. Some apple trees have been entirely stripped of leaves—not only rendering a crop impossible, but checking the growth of the tree at the most important period of the year, and rendering it liable to injury by winter, and retarding its vigor in future. It is not too late now to commence the destruction of the eggs, which have been recently placed upon the young twigs. As they are usually on the projecting shoots, near the outside of the tree, the practiced eye will quickly detect their presence, and a single clip of a pair of orchard shears, placed on the end of a pole, and worked with a cord, will bring them to the ground. This is much easier than the more laborious and more uncertain process of brushing, swabbing, winding, thrashing, pounding and crushing, after the caterpillars are half or wholly grown, for no individual escapes when the little ring of eggs is taken off entire. In the autumn, after the leaves have fallen, pass around again and clip out the remainder. By going through the orchard at least two or three times, there is less chance for any accidental hidden rings to escape. A cloudy day should be selected, so that the light may not dazzle or injure the eye; and after some practice, it is surprising with what quickness any one may detect these rings on the twigs, by a glance over the apple tree. Cherry, pear and other trees should be examined in the same way.

A careful attention to these instructions any time before the coming spring will completely clear orchards of this pest, and the owner will have the satisfaction, as he passes the trees, of seeing them full of healthy foliage, without the annoyance of witnessing these huge nests on denuded branches.—*Country Gentleman.*

LIME FOR GRAPES.—Dr. Kirtland, of Ohio, thinks that where lime is needed for grapes, the best form in which to apply it is sulphate of lime (gypsum or plaster.) He would use a bushel to a bushel and a half annually per acre. He does not say how and when he applies it, but we presume this is not of much consequence.

IT is the law in Japan that not a fir or cypress tree can be cut down without the permission of a magistrate, and for every full grown tree that is felled a sapling must be planted.

BEARS.—There should be two pet bears in every house. Bear and forbear.



## Ladies' Department.

**HOW TO MAKE GOOD MANGO PICKLES.**—Before commencing operations ascertain to a certainty if you have the following articles: good cider vinegar, beer vinegar is not good for pickling, as it cuts or softens the pickles—white mustard seed. It is called white by the druggists, but is really yellow—mace, allspice, capsicums or red peppers, a little root ginger, green if convenient. Reject cloves, powdered ginger, or cinnamon, as cloves discolor pickles, powdered ginger makes the vinegar muddy, and cinnamon is decidedly objectionable to the taste of many persons. It is taken for granted that you have some salt, the mangoes, and a crock in which to put them.

Prepare any quantity of small round white onions, small cucumbers, very small green tomatoes, nasturtions, pieces of carrot, cauliflower, radish pods, green grapes, and in fact any thing that can be made into a pickle, excepting red beets. Select mangoes or young green musk melons with a smooth skin—the rough skinned nutmeg melons are useless for this purpose. Cut from any part of the mango and in whatever shape you please a small space large enough to admit the insertion of your finger or a small spoon for the purpose of cleaning the inside of seeds and pulp, which should be done thoroughly, leaving the inner surface white, smooth and clean, putting each piece into each mango for further use. If you wish to economize in salt, fill the mangoes with any of the vegetable ingredients before mentioned, put the whole into a crock, pour boiling brine over them, cover and set aside.

In five days if the brine has been made strong enough they will be ready to receive the final treatment. Take them from the crock, turn each melon up side down to drain—also allow the ingredients to stand for at least half an hour. Procure a darning needle and some coarse darning cotton, fill each melon with a small cucumber or two, onions, &c., one or two spoonfuls of mustard seed, according to the size, apply the proper lid, and sew it or lay on one side, and when all are done, place a few on the bottom of the crock and fill up the vacant spaces with the onions, cucumbers, &c., which you will have to spare, and so proceed till all are packed, occasionally shaking the crock to more effectually compact them. The advantage of this process is to save vinegar. Just before packing put the quantity of vinegar you expect to use in a porcelain or brass kettle, with mace, allspice, &c., pour over the pickles boiling hot, cover close and set aside. In two or three days they will be fit to use. A six gallon crock properly packed will certainly not take a gallon of vinegar, and to that quantity I should allow nearly an ounce of mace, a quarter of a pound of allspice, four red peppers, and to the whole quantity of pickles, including that much in the inside of the melons I should use at least half a pound of yellow or white mustard seed.

This pickle will keep all winter in a cool dry cellar.

**HAIR WASH.**—Alcohol, 8 oz.; castor oil, 3 oz.; tinct. cantharides,  $\frac{1}{2}$  oz.

**HOW TO MAKE SPRUCE BEER.**—As the season is here when pleasant summer drinks, free from alcoholic influence, are frequently brewed by the housewife, or the well brought-up daughters, who are taught a little of everything in the way of household duties—we append the following receipts, which are claimed to be excellent:

1. Take three gallons of water, of blood warmth, three half pints of molasses, a tablespoonfull of essence of spruce, and the like quantity of ginger—mix well together, with a gill of yeast; let stand over night, and bottle in the morning. It will be in good condition to drink in twenty-four hours. It is a palatable, wholesome beverage.

2. Those who prefer mead have only to substitute honey for the molasses named above, and for one-third the ginger use allspice. Half the quantity of yeast will be sufficient, and the bottling should occur the second day instead of the next morning. It will be fit to drink in four days after being bottled, and will keep for many weeks. A small quantity of alcohol is formed during the fermentation, and this prevents the acetous fermentation so common to spruce beer. The essence of spruce is of course left out in the making of mead. The alcohol formed from the fermentation of honey, resembles that found in *metheglin*, while the alcohol from the fermentation of molasses is *rum*. Those who imagine that they can make either spruce beer or mead without forming any alcohol, are mistaken.

3. Prepare a five or ten gallon keg, in proportion to the size of the family—draw a piece of coarse bobinet, or very coarse book-muslin over the end of the faucet that is inserted into the keg, to prevent its choking, a good tight bung, and near to that a gimlet hole, with a peg to fit it tight.

*Recipe for Five Gallons.*—One quart of sound corn, put into the keg, with half a gallon of molasses; then fill with cold water to within two inches of the bung. Shake well, and in two or three days it will be fit for use. Bung tight.

If you want spruce flavor, add one teaspoon of essence of spruce—lemon, if lemon is preferred—ginger, or any flavor you prefer. The corn will last to make five or six brewings; when it is exhausted, renew it. When the beer passes from the vinous to the acetous fermentation, it can be corrected by adding a little more molasses and water.

This is a simple, cheap beverage, costing about three cents a gallon. After the beer becomes ripe, it ought to be kept in a cool place, to prevent it from becoming sour before it is exhausted.

**LEMON CHEESE CAKE OR FRENCH HONEY.**—One pound lump sugar broken into pieces, six eggs, leaving out two whites, the juice of three lemons, the rinds of two grated, and a quarter of a pound of butter. Pour all these ingredients into a pan, stirring them gently over a slow fire until the mixture becomes thick and looks like honey. The mixture will keep for twelve months if put into a jar, tied down with paper and kept in a dry cool place.

Germantown.



## Miscellaneous.

### DRIVING HOME THE COWS.

Out of the clover and blue-eyed grass,  
He turned them into the river-lane;  
One after another he let them pass,  
Then fastened the meadow bars again.

Under the willows and over the hill,  
He patiently followed their sober pace;  
The merry whistle for once was still,  
And something shadowed the sunny face.

Only a boy! and his father had said  
He never could let his youngest go!  
Two already were lying dead,  
Under the feet of the trampling foe.

But after the evening work was done,  
And the frogs were loud in the meadow-swamp,  
Over his shoulder he slung his gun  
And stealthily followed the foot-path damp.

Across the clover and through the wheat  
With resolute heart and purpose grim,  
Though cold was the dew on his hurrying feet,  
And the blind bats fitting startled him.

Thrice since then had the lanes been white,  
And the orchards sweet with apple bloom;  
And now when the cows came back at night,  
The feeble father drove them home.

For news had come to the lonely farm  
That three were lying where two had lain;  
And the old man's tremulous, palsied arm  
Could never lean on a son's again.

The summer day grew cool and late;  
He went for the cows when his work was done;  
But down the lane, as he opened the gate,  
He saw them coming, one by one.

Brindle, Ebony, Speckle, and Bess,  
Shaking their horns in the evening wind;  
Cropping the butter cups out of the grass—  
But who was it following close behind?

Loosely swang in the idle air  
The empty sleeve of the army blue;  
And worn and pale, from the crisping hair,  
Looked out a face that the father knew;

For Southern prisons will sometimes yawn,  
And yield their dead unto life again;  
And the day that comes with a cloudy dawn  
In golden glory at last may wane.

The great tears sprang to their meeting eyes;  
For the heart must speak when the lips are dumb,  
And under the silent evening skies  
Together they followed the cattle home.

—Kate Putnam, in *Harper's Magazine*.

### A BISHOP AND HIS GUESTS.

THERE is a story afloat among the clubs, which will scarcely be printed in England, concerning the Bishop of Ely, that may remind you of an incident in Don Quixotte, but is said really to have occurred. The good bishop obtained his advancement through the Earl of Rutland, whose acquaintance he made by having once been driven by a storm to take refuge in the earl's mansion. No sooner had he been promoted than he began to use his authority in securing fat places for his relatives. One clerical nephew was especially benefitted, being made rector of this, prebend of that, and dean of the other, to the extent of nine or ten places, for which he did no work, but drew salaries. Of course the rectors and curates not related to the bishop did not like this. On one occasion, when the bishop and his many-titled nephew were going to a certain town, they requested an humble curate who was going before

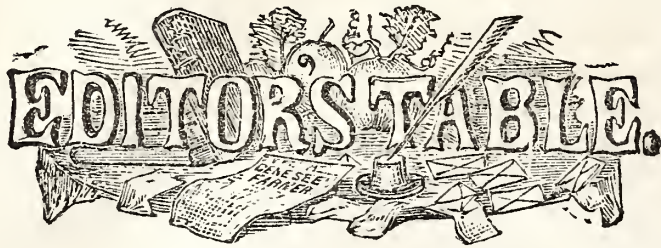
them to call at the hotel and say that the Bishop of Ely was coming, and desired dinner at 7 o'clock. The curate, having given the message, mine host inquired if there would be any company to dine with his lordship. "Oh, yes," replied the curate, and went on to say the rector of this, the prebend of that, the dean of the other would dine with him, and the landlord took down the ten titles, and prepared dinner accordingly. At last the bishop came; he and his nephew sat for a long time waiting for dinner. At last the bell was rung, and the reason for the delay demanded. "Why, your lordship's guests have not arrived?" "Guests! I have no guests!" "If your lordship will pardon me, here are the names of the ten gentlemen who were announced as to be with your lordship." The bishop read the list of titles—all of which were present—and said, "Well, we will not wait for them any longer." The magnificent dinner for ten was brought up and eaten by the two in silence.

THE EFFECT OF MARRIAGE.—Doubtless you have remarked with satisfaction, how the little oddities of men who marry rather late in life are pruned away speedily after their marriage. You have found a man who used to be shabbily dressed, with a huge shirt collar, frayed at the edges, and a glaring yellow silk pocket-handkerchief, broken of these things, and become a pattern of neatness. You have seen a man whose hair and whiskers were ridiculously cut, speedily become like other human beings. You have seen a man who took snuff copiously, and who generally had his breast covered with snuff, abandon the vile habit. A wife is the grand wielder of the moral pruning knife. If Johnson's wife had lived, there would have been no hoarding up of bits of orange peel; no touching of all the posts in walking along the street; no eating and drinking with a disgusting voracity. If Oliver Goldsmith had married, he never would have worn that memorable and ridiculous coat. Whenever you find a man whom you know little about, oddly dressed, or talking ridiculously, or exhibiting eccentricity of manner, you may be sure that he is not a married man. For the little corners are rounded off, the little shoots are pruned away, in married men. The wife's advices are the tiller that keeps the ship steady. They are like the wholesome, though painful, shears, nipping off the little growths of self-conceit and folly.—*Frazer's Magazine*.

"GENTLEMEN," said Admiral Farragut to some of the officials in the Navy Department who wanted to put off a lot of "favorites" upon the old sea-dog as efficient officers; "gentlemen, you can no more make a sailor out of a landlubber by dressing him up in sea-toggery and putting a commission in his pocket, than you could make a shoemaker of him by filling him with sherry-cobblers!"

A TALL fellow, standing in the parquette of a theater, was repeatedly desired to sit down, but would not; when a voice from the second circle cried out, "Let him alone; he's a tailor, and he's resting himself."





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## THE GENESEE FARMER FOR 1866.

### THREE MONTHS FOR NOTHING!

WE continue our offer this month to send the October, November and December numbers of the *Genesee Farmer* to all who subscribe at this time for next year. New subscribers will thus get 15 numbers for one dollar, or three months for nothing.

Of course it is only through the aid of our present subscribers that this offer will be of any avail. If each one of our readers would call the attention of his or her friends to this offer, and would ask them to take the *Farmer* we should have the pleasure of entering several thousand new names on our books for 1866.

We can safely promise our subscribers a better paper for 1866 than ever before, and we have, therefore, less hesitation in requesting them to exert their influence at this time to increase our circulation. If those who now take the *Farmer* would say a good word for it to their neighbors and friends they could double our circulation before the end of the year.

Many of our subscribers have friends at a distance, to whom we should be glad to send a specimen copy of the *Farmer*, if they would send us the names and post-office address. Send us in as many new subscribers as you can the present month, and also the names of a dozen or two good farmers to whom we can send a copy of the *Farmer*. We would like to put a copy of the *Genesee Farmer* in the hands of every intelligent farmer and fruit grower in the United States.

### Monroe County Fair.

MONROE County is confessedly one of the richest agricultural and horticultural counties in the State, and should make a splendid exhibition of its products at our Annual Fairs, but it has never done itself justice in this respect. The blame rests with the farmers and fruit growers of the county. They seldom attend the annual meeting for the election of officers, and many of the very best farmers in the county, take no interest whatever in the Society.

The Fair this year, now being held, is equal to the average, but is not at all creditable to our farmers. There is a fair show of Merino sheep, and a few pens of really good South Downs. There is a fair show of working oxen, and one or two respectable grade animals, but if there are any first-class Shorthorns and Devons we failed to see them. Perhaps in the multitude of empty pens they were overlooked! Perhaps the same is true of the Suffolk, Berkshire and Yorkshire pigs. None were visible. There are some good specimens of the "Cheshires"—a useful breed, if it is sufficiently established to be called a breed.

The show of implements was rather indifferent. There was a potato digger on the grounds, that looked as though it would do good service. It is manufactured in this county, but where we could not learn. We think it would be well, both at our State and County Fairs to give the names and post-office address of exhibitors on the cards.

There is a fine display of fruits in the Amateur class, but the nurserymen for some reason do not exhibit.

### Farmers' Clubs.

Town and County Farmers' Clubs should now be the order of the day. Let new life be infused into those already established, and new ones started where none exist. Let them be formed in the simplest manner. The less formality and machinery the better. Call a meeting and elect officers, and select some good subject for discussion at the next meeting, and appoint some good practical farmer to give his views on the subject. Strict order should be maintained, but generally it is better to let the discussions take rather a wide range so long as the members seem to be interested.

### Incorrect Market Reports.

A FAMILY paper, published in this city, in its latest issue of September 30, says "there is little change in prices," and judging from its report of the Rochester markets the same remark may have been made weekly for the last six months. For instance, it has quoted mill feed at \$30.00@ — per ton for months past, while to our certain knowledge farmers could have bought it for \$15.

On the other hand, barley has been quoted for months past, and is now quoted, at 70c.@75c. per bushel, while we had no trouble in selling it last week for \$1.10.!

TO OUR SUBSCRIBERS.—We shall be glad to hear from any of our readers on any subject of interest to the Agricultural community.



**The Markets.**

As we anticipated last month the rapid advance in wheat was followed by a slight re-action. Prices fell 10 cents a bushel from the highest point, but they have again advanced. Red and amber wheat now bring in this city \$1.90 to \$2.00 per bushel. White wheat \$2.00 @ \$2.35.

Barley in this city is still low—\$1.00 to \$1.10 per bushel. In Buffalo barley is higher than with us, and it is probable that the price will advance here in the course of a few weeks. In Toronto it sells for 80 cents, which, with gold at \$1.44 is equal to \$1.15. To this must be added the cost of bringing it here. Good barley ought to bring at least \$1.25 in this city.

Corn is scarce and higher. A few loads of the new crop have been brought in and sold at 45@50 cents per bushel of ears. Oats 45c. Rye 85c. Peas \$1.00 @ \$1.20. As yet little is doing in beans, and it is difficult to give quotations. As few were planted they will probably command a good price. Wool is quiet at about 60 cents. Timothy hay brings from \$12 to \$16 @ ton. Straw \$8@9. Potatoes are again higher, say 75 cents, and we hear of contracts made at higher figures. The crop is a light one. Winter apples \$4@5 @ barrel.

Cattle, Sheep and Hogs still command high prices. In fact fat cattle are higher now than at this time last year. And the same is true of Hogs. Hogs advanced  $\frac{1}{2}$ c. @ lb. in Albany last week. They bring 13@14c. @ lb. live weight. Store sheep, in Albany, are quoted at  $3\frac{1}{2}$ @4c. @ lb.; and fat sheep 5@7c., according to quality.

At the last New York Cattle Market, extra or premium cattle brought as high as 19c. @ lb., estimated dressed weight, while the lowest grades were slow of sale at 11c.! We can not too often call attention to this enormous difference in the price of poor and good cattle. The average price was about 15c. Sheep brought from 6c. to  $7\frac{1}{4}$ c. @ lb. live weight. Lambs  $8\frac{1}{2}$ c. @  $9\frac{1}{2}$ c. Milch Cows are in demand at from \$50@\$65 for common; \$80 @\$90 for good; and \$100@\$130 for extra. Veal Calves are very scarce and high at 10c. @ 15c. @ lb. live weight. Hogs 14c. @ 15c.

In regard to future prices everything seems to indicate a somewhat higher range. In the interior, currency is very scarce, and this checks speculation. Still most kinds of farm produce bring higher prices than farmers generally expected, and we have only to repeat what we said last month that as a general rule it is better in such circumstances to sell when you get ready. At Chicago wheat is held so high that little can be shipped East at present prices. At Milwaukee wheat has advanced 7c. within a week. Gold is firm at 144. At this time last year it was 190, but a month later it was 216, and in a week or two later, 260.

**The Great Provincial Fair**

Was held this year at London, C. W. The show of horses, cattle, sheep and pigs was unusually large. The entries in these classes foot up over eighteen hundred! There were 698 entries of sheep, principally of the mutton breeds. There was a splendid show of grains and roots, the entries amounting to 1,355. At the Plowing Match the entries were over 100. These figures show the interest which the farmers of Canada feel in their great Fair.

**The New York State Fair.**

We had purposed giving a full report of the different departments at the late State Fair at Utica, but can not find room for it this month. We may remark that the exhibition of cattle and sheep was not equal to last year. Mr. Thorne showed some truly splendid South-downs, and Mr. Lorillard some excellent Shropshire Downs, while Mr. Gazeley was about the only exhibitor of "Longwooled" sheep. The "gas tar" Merinos were out in full force, and there seems to be no abatement in the fever. Some of the exhibitors are able to ask \$3,000, \$5,000, and even \$10,000 for a ram without blushing! Mr. Chamberlain of Red Hook, showed several pens of Silesians, with good carcass and fine wool. We are inclined to think they are the most valuable Merino sheep we have.

The show of pigs was a disgrace to the State! There were a few good Yorkshires, and that was about all the thoroughbred pigs exhibited. The "Cheshires" were shown in considerable number.

**A Delightful Beverage.**

Many attempts have been made, with only partial success, to prevent cider from becoming hard after it has been kept a few months. In the early stages of fermentation, and before it has fermented at all, it is a delightful beverage, and a process by which fermentation can be arrested at any desired point is a *desideratum* entitling the discoverer to the thanks of the public. Such a process has been found by Mr. Wm. Chamberlain, of Albion, N. Y., who has been experimenting with cider for several years past for the purpose of attaining that object, and we think he has succeeded admirably, judging from some samples of cider prepared by him last fall which we had the pleasure of tasting. It is not insipid like cider fresh from the press, but is bright, sparkling and piquant. Mr. Chamberlain has not yet put any cider into market, but designs to do so this fall. It can be made cheaply enough to enable everybody to use it.—*Rochester Democrat, August 26.*

**Washing Sheep.**

An esteemed correspondent sends us an excellent article on the question of whether it is better to wash sheep or to sell the wool unwashed. He has in an experience of forty years found no injury to the sheep from washing, and takes decided ground in favor of continuing the practice, as one which gives greater uniformity in the wool, so far as cleanness is concerned, and which consequently enables the buyer to purchase with less risk, and which in the end must benefit the seller. We agree with him perfectly in this opinion, and should give his article entire, only that it is now out of season.

**LOST NUMBERS OF THE FARMER.**—We can supply any numbers of the *Farmer* to those who have lost or failed to receive them. This we do without charge, as we are anxious that our readers should preserve the entire volume.



### New Advertisements.

Among the new advertisements in the *Farmer* this month will be found one of especial interest to farmers' sons. Burnham's Business College, located at the beautiful city of Springfield, Mass. is, we are assured by a disinterested person, well qualified to judge, *one of the best institutions of the kind in the United States*, and we would recommend our young friends who think of studying book keeping, &c., the coming winter, to write to Mr. Burnham on the subject.

J. M. Thorburn & Co., the celebrated Seedmen of New York, offer a choice collection of Bulbous Flowering Roots, and will send a catalogue with directions for cultivation, *free*, to all applicants.

C. B. Richardson of New York, wishes agents to sell a work in which everybody is interested—Sherman and his Campaigns.

Our horticultural readers will not overlook the advertisement of Mr. E. Williams of Montecalm, N. J., in regard to his new Kit-tatinny Blackberry, a new Blackberry that Charles Downing pronounces the best variety he has yet seen, must be worthy of attention.

Sehenek & Romain of New York can furnish Peach Pits from the natural Virginia peaches.

D. M. Dewey of this city, who has had great experience in getting up colored plates of fruit and flowers, has issued a new catalogue of his plates, which will be sent free to all applicants.

John Giles of South Woodstock, Conn., will sell at public auction on the 18th of October, 30 head of thoroughbred Ayrshires and 20 head of Alderneys. We need hardly say that Mr. G. is one of the best breeders in the United States.

J. W. Mount of Medina, N. Y., will send a circular to all who wish a good wood sawing machine the coming winter. Coal in this section is likely to be higher than ever before known, and wood will be in demand.

### Literary Notices.

DORA DARLING: The Daughter of the Regiment. Boston: J. E. TILTON & Co.

We have in this little book another story of the war, but quite original in its character and incidents. The narrative is lively and the interest well sustained. The character of Dora herself is fresh and natural, and "Pieter," an old negro is one of the best of the numerous counterbands who have lately become heroes in print. Old and young will find this a charming book. It is well printed and illustrated, and beautifully bound.

THE SOLDIERS' CASKET. September. Philadelphia: C. W. ALEXANDER & Co.

This is a new monthly periodical, devoted to the interest of the soldiers. It is filled with accounts of the prominent battles during the war, and gives many interesting anecdotes of skirmishes which will find attentive readers among those who now, after a well-fought campaign, find their chief pleasure in fighting their battles over again by the firesides. Notices of officers and soldiers who distinguished themselves, are given each month. As a literary periodical it is quite equal to average magazines, and superior to many which have a large circulation.

### The Genesee Farmer in Canada.

We hope our subscribers in Canada will make an effort the coming winter to increase the circulation of the *Genesee Farmer*. It has always had many active friends in Canada, and such we hope will always be the case. For 70 cents *Canada money* we will send the *Farmer* for 1866, and the remaining number of this year. Or we will take three subscribers for \$2.00. Let us hear from our Canada friends at once. We like the color of their money!

### Death of Joseph Frost.

Just as we go to press we are pained to hear of the sudden death by apoplexy of Joseph Frost of this city. Mr. Frost was a member of the firm of Frost & Co., of the Genesee Valley Nurseries, and was greatly esteemed by all who knew him. Some years ago Mr. Frost was horticultural editor of the *Genesee Farmer*, a position which his thorough knowledge of fruit culture in all its branches enabled him to occupy with great advantage to its readers. His death is a public calamity.

### Inquiries and Answers.

GUANO FOR CORN.—I think of using about 500 pounds of guano another season applied to corn. I have never used any, and should be glad of your opinion in the October number of the *Farmer* as to the best mode of application, whether in the hill or sown broadcast and harrowed in. I thought of preparing it by mixing it with sand and gypsum in certain proportions, and applying it in that way. Please inform me and other readers of some dealer in the pure article that can be relied on. In your experience is guano or superphosphate of lime the best manure for corn? I think if I am successful some of my neighbors will try it. We are creatures of imitation.—L. ROYS, Oxford, N. Y.

We do not know where a genuine Peruvian guano can be obtained in this country at present. Before the war it was used to a great extent in Maryland, Delaware, Virginia, &c. If we recollect rightly, as much as 145,000 tons has been used in a year. Baltimore was the principal market. When the war broke out the Southern demand ceased, and the general stagnation of business which ensued at the North, with the extremely low price of agricultural produce, cast such a gloom over the minds of our farmers that no one thought it would pay to use guano. The *Genesee Farmer*, we believe, was the only paper that predicted great activity in business with high prices for farm produce.

It seemed impossible to induce farmers to invest money in improving their land. There were thousands of tons of guano in this country, but no one would buy it, and *the whole of it had to be re-shipped and sent to England*. We believe no Peruvian guano has been sent to this country since that time. Perhaps the high premium on gold would put up the price so high that little would be used, though we question whether a good genuine Peruvian guano, containing say 16 per cent. of ammonia and 25 per cent. of phosphates, would not at \$90 or \$100 per ton, be the cheapest artificial manure in market.

Admitting, however, that we had the Peruvian guano—and perhaps we shall before spring—it is somewhat questionable whether *Indian Corn* is the best crop on which to apply it. We have never yet tried guano on the corn crop where the increase of the corn at 50 cents a bushel paid for the guano. Could we be sure of one dollar a bushel, with guano at the old price, its application would probably prove profitable. We are inclined to think, however, that Peruvian guano can be applied to winter wheat with more profit than to Indian corn, when the former brings double the price of the latter.

If you use guano on corn, sow it broadcast without



adding anything to it, say at the rate of 300 pounds per acre and harrow it in thoroughly previous to planting. We think this is better, on the whole, than applying it in the hill, for unless great care is used it will be apt to injure the seed.

**LONG WOOLED SHEEP ON LOW LAND.**—I wish you would give me some information about long woolled sheep. I keep fine woolled sheep, but I have several hundred acres of pasture land which is too wet for fine sheep. Some of it is in prairie, with a surface soil of peat from twelve inches to two feet deep. And I wish to get and breed a flock of long wools that would thrive on such pasture, and have thought that the Cotswold or Romney Marsh or Lincolnshire sheep would do it. I have no knowledge of these sheep except what I get from books and papers. Will you please give me your opinion. I have plenty of excellent corn land, and can make mutton in the winter of any sheep that would thrive in the summer on coarse pastures. Will you please give me your opinion of what breed would succeed best on such land, and where I could get a few to try them; say 50 or 100 ewes, and one or two bucks, and what price I would probably have to pay?—**JOSEPH KINNY, Adrian, Seneca county, Ohio.**

We should be glad if some of the readers of the *Farmer* who have had experience in raising sheep on such land would answer the above. We are of the opinion that no breed of sheep will thrive on low wet land until it is drained. On such land, after it was drained, the Leicester or Cotswold sheep would do better than any other breed.

In regard to purchasing the sheep, the best plan, provided nothing more is intended than to raise sheep for the butcher, would be to go to Canada, and pick up some young thrifty ewes of the better sort of ordinary long wool sheep. These could probably be got for about the price they are worth for the butcher. If a hundred of such ewes were selected with good judgment and then bred to the thoroughbred Leicester or Cotswold ram, an excellent flock of sheep could be obtained in a few years. At the same time it might be well to purchase a few thoroughbred Leicester or Cotswold ewes.

**CULTIVATOR FOR HEAVY LAND.**—In the September number of the *Genesee Farmer* I notice an inquiry for a cultivator which is more effective on clay soils. I take my Geddes harrow with 16 inch square, teeth 12 inches in length, flat side of the teeth forward, and instead of pointing them, flatten them, which makes the points one inch wide, giving them about as much curve forward as they can have and go through a four inch square seantling perpendicularly, (which is the size of the timber in my harrow.) With this I harrow all heavy soils, especially fall plowed grounds for spring wheat and oats.

On page 85 of the March number of the *Farmer* for 1865 will be seen a drawing of the Geddes harrow.

When a change is needed in the shape of the teeth it is done at a small expense for straightening and pointing.

One advantage of this plan is you can harrow just what depth you please by driving the teeth, or increasing the weight of the harrow.—**Wellsburg, Chemung county, N. Y.**

**ONE-HORSE MOWERS.**—Is it practicable to cut meadows with a one-horse mower, horse's weight eight hundred pounds; and what is your opinion of one-horse mowers?—**P. P. MOORE, Mt. Pleasant, Hanover county, Va.**

We have had no experience with a one-horse mower, but there can be no doubt that it is perfectly practicable to cut grass with them.

**TURKEYS.**—Will you be kind enough to inform me through your valuable paper where I can find a breed of turkeys larger than mine? Mine generally average from ten to twelve pounds. Also, what they would be worth a pair. Which is the most profitable, to sell turkeys in the country for eight or nine cents per pound or ship them to New York?—**Homer Wilcox, Wayne, Ashtabula county, Ohio.**

The Bronze turkeys are the largest breed, we believe, in the country. We do not know who has them for sale, or what the price is. Probably they will be advertised in the *Farmer* before another season.

Turkeys are quoted this week in New York at 30 cents per pound alive, and at 33@35 cents per pound dressed. They are said to be "scarce." We do not know how it is in other sections, but in this neighborhood most people have been "unlucky" in rearing their young turkeys, owing perhaps to the wet weather. One of our neighbors who raised a large flock last year, has succeeded, with all the care she could bestow upon them, in rearing only nine.

**MERINO SHEEP WANTED.**—I take the liberty of inquiring of you what 500 or 1,000 store or stock Merino sheep from 1 to 4 years of age, including bucks, all in good health and condition, can be purchased at in your section?—**ALFRED TALIAFERRO, Culpepper C. H., Va., Sept. 5, 1865.**

A flock of ordinary Merino sheep can be purchased in this section for \$3.50 to \$5.00 per head, according to condition.

If you wish choice, thorough bred Spanish Merinoes the price will be of course much higher. Large sums are asked at the present time for some of the fancy strains of the "American Merino."

**GARGET IN COWS TEATS.**—Will you please inform me through the columns of your paper if there is any cure for garget in cows bag or teats. I have a cow that has a teat which I have not milked for two years. She is an excellent milker with that exception. Please inform me in your next issue.—**R. W. SLAYTON, Lapeer, Mich., Aug. 14, 1865.**

As the trouble is of such long standing we think a cure will be difficult, and only to be obtained by using an instrument to open the teat. We have had no experience in a case of this kind, and should be glad to hear from those who have.

**ORCHARD GRASS, &c.**—Inclosed is fifty cents. I wish you to send me the *Genesee Farmer* for the remainder of the year. I subscribed for the *Canada Farmer* at the commencement of the year, and find it a very good work, but I want the *Genesee Farmer* again. Your "Walks and Talks on the Farm" and your market report I think much of. They are worth all the paper costs.

Can you or any of your subscribers tell me about orchard grass? Is it good for hay; whether it is better to sow it with clover or not; what soils it will do the best on; and whether it should be sown in the spring or fall, and what quantity per acre? Any information on the above will be thankfully received.—**GEORGE T. HAVENS, St. Catharines, C. W.**

Will some of our readers give us their experience with orchard grass?

**COAL ASHES.**—Mr. Bowen says he reclaimed a piece of yellowish white clay which was almost barren, by a liberal use of coal ashes.

**BETTER** go to bed supperless than rise in debt.



**The Reciprocity Treaty**

Between the United States and Canada expires on the 17th of next March. In view of the probability of the treaty not being renewed in its present form, the Lower Canada *Agriculturist* advises farmers to sell all their produce this fall and not to "wait till the 17th of next March, when the probable repeal of the Reciprocity Treaty may be the ruin of many well-to-do farmers in Canada." There can be no doubt that this advice will be generally followed, and the effect will be to lower the price of produce, cattle, &c., the present fall, while it may advance in the spring.

**Special Notices.**

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
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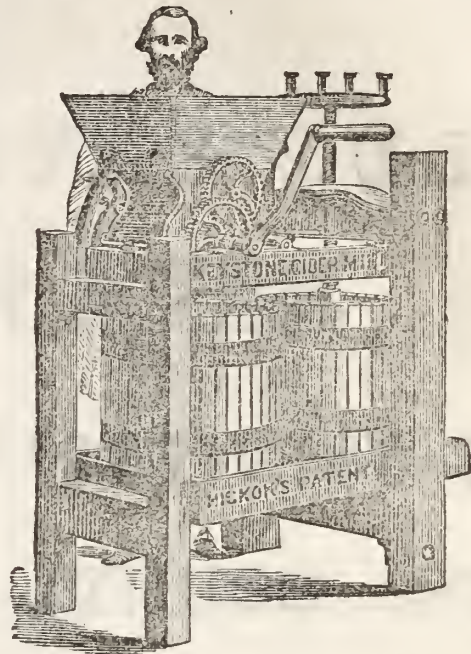
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## HICKOK'S PATENT PORTABLE KEYSTONE CIDER AND WINE MILL.

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This Paste, employed as a Sheep Wash, according to the directions furnished by the Company, has the effect of curing Scab and other cutaneous diseases, and destroying all parasitic insects which infest the skin and wool of the Sheep, and thereby improves the health of the animal, as well as the quality of its fleece. Employed in the same way, the solution being made stronger, it will destroy those insects which infest the skins of larger animals, and also those that are injurious to vegetation.

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*Assayer to the State of Massachusetts, and  
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Any soldier can start a Local Union, and there should be one in every town. The Constitution and By-Laws of the Association are published in the October number of **THE CASKET**.

**MRS. MAJOR-GENERAL SHERMAN**, who is a lady of the finest literary accomplishment, has written for the September number a most touching and beautiful article in memory of her son Willy, who was a Sergeant of the First Regulars, and who died suddenly some months before his father set out on his splendid Georgia Campaign. In the same number is also given a Beautiful Engraving of the Monument erected by the regiment over his grave.

**GENERAL GRANT'S LOG CABIN.**—A fine engraving of this cabin, which was used by General Grant during his Richmond Campaign, is given in the October number.

**THE MONSTER MEMORIAL.**—In each November number of **THE CASKET** will be bound a blank form of petition to be filled with names and sent to Congress in favor of giving an additional bounty to the soldiers of 1861, 1862, 1863 and 1864, and also to the widows and orphans of those who fell in battling for their country. Let every soldier, every soldier's relation, and every friend of the soldiers' cause, get a November **CASKET** at the nearest bookseller's, or send to us for one, and let them obtain the signatures of every one they know. Full directions on each blank form.

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## WALKS AND TALKS ON THE FARM.—NO. 23.

THE Monroe County Agricultural Society at its last exhibition appointed me chairman of the Committee on Rag Carpets. I was compelled to decline the honor on the ground of incompetency. I once acted as a judge on "Comfortables" and "Counterpanes," but could not but feel that every old lady in the tent knew more of such matters than I did. One cannot help feeling the importance of being a judge—of wearing a badge—of having the bystanders give way and the exhibitors hold their breath, while the "Committee" with knowing looks and a critical air examine the articles. But though all this is very pleasant to one's feelings, yet if you are entirely ignorant of what constitutes excellence in a rag carpet, it is best to forego all this attention and honor. It is too important a matter to be passed over lightly, and your dreams may be disturbed for the next six months by fears that your decision was not in strict accordance with the relative merits of the articles. Had it been some unimportant committee, such as on stock, or grains, or implements, I might have accepted. These are of little consequence, and I notice that some of our agricultural societies are offering premiums in proportion to the relative importance of these articles. Thus the "Central Iowa District Agricultural Society" offers a prize for the "best chenille rug, \$2,00," and for the "best half bushel of wheat, 50 cents." This is the only prize offered for wheat, while there are forty prizes of one dollar each offered for "pantry stores," such as "jelly cake," "mango pickles," and "plum catsup." This is as it should be. Who cares to look at a sample of wheat, or of what consequence is it in American agriculture? If there is any old foggy farmer who still takes an interest in wheat culture and wishes to exhibit a sample of his produce, why a premium of 50 cents is certainly all that he has any reason to expect in this "progressive" age!

Up to this date, (October 16), we have had a very favorable fall for getting in the crops. Last year, to the best of my recollection, we had but one good

bright day in October. There were whole fields of beans still out, and few had commenced to husk their corn. Now I am nearly through husking and have drawn in two loads of stalks. I drew them in, however, a little too soon, as I see that they steam up considerably in a morning. I put them in very small stacks, thinking that the air would circulate through them; but they were evidently not sufficiently seasoned. I shall know better next time. This is the only consolation there is in making mistakes. The Doctor says, "a man needs to live one life in order to learn how to live,"—and this is emphatically true of a farmer. Last year I got caught with my buckwheat. It was all ready to cradle, but being busy with other things, I kept putting it off day after day, till on the morning of the 4th of October, I woke up to find the ground covered with snow, and my buckwheat "flat as a pancake." Wet weather ensued; the buckwheat had to be cut with a scythe, and cured in the swath and in small cocks. It was not ready to draw in till the middle of November, and by that time the ground was so wet that I could get on it only with oxen. I had a terrible time with it, and when I finally got it thrashed, the buckwheat was so damp that it was difficult to do anything with it. "Experience makes fools wise," and this year I was determined to cut my buckwheat the moment it was ready, which is said to be when half the seeds are fully formed—the other half ripening up from the sap in the straw. I sowed three pecks of seed per acre, thinking that as it had been damp, and was a little musty, it might not all grow. Half a bushel would have been plenty. The growth was very heavy, and I think it would have branched more and filled better had it been thinner on the ground. I cradled it and stood it up in small bundles, and as soon as the seed was dry and hard, I drew it in and thrashed it from the wagon as we drew it. The straw was still full of sap, and I thought it might wind round the cylinder, but it did not. We drew in and thrashed the six acres in a day and had 150 bushels. I am now plowing up the land and hope to be able to seed it down with oats next spring. This low land will pay



better in grass than in any other way. When I can once get it well seeded I shall raise no more buckwheat, though I would not speak disparagingly of buckwheat. It is a useful crop on land too wet in the spring for oats or corn. But a good crop of red-top and timothy is of course far better.

My peas yielded about thirty bushels per acre. But they are full of bugs! Can nothing be done to get rid of this pest? Late sowing is said to be a remedy, but it is often worse than the disease, as, if dry weather sets in the crop will be light. A good, smothering crop of peas will sometimes clean the land as well as a summer fallow; but a light crop leaves it foul. Notwithstanding the bugs, I think that I have had no more profitable crop this season than these peas. I had forty-six loads of vines, nicely cured, bright and sweet, which I consider more nutritious than over-ripe and poorly cured clover hay. There was an immense growth of vines, and they smothered the weeds. I plowed the land twice after the crop was off, and as the Deacon says, it looks as well as a smart summer fallow, and in his opinion will give better wheat than if it had been "sun burnt."

The Deacon says that the farmers in the southern counties where grass is the main crop, told him that they found the greatest advantage from thick seeding. They had tried the experiment of sowing as much as half a bushel, (say thirty pounds,) of clover seed per acre, and were satisfied that it paid.

The crop was very heavy, and the quality of the hay very superior, not being so coarse as when thinner on the ground. I sowed last spring only six quarts of clover seed per acre, sowing no timothy or other grass seed—and a better catch could not be desired. The weather was unusually favorable, and doubtless all the seed grew. The advantage of thick seeding is to *insure* a catch. If the plants are thin, the weeds spring up and occupy the land. As a general rule we do not sow enough grass and clover seed. If everything is favorable, four quarts of timothy seed and four quarts of clover is enough, but it is better to sow double this amount rather than to run any risk of having poorly seeded meadows. My advice has always been, "Raise your own clover seed and sow it with an unsparing hand."

"Why did you not sow timothy with the clover?" Because I intend to break up the land in two years and sow wheat; and I have a theory that timothy, being a cereal, robs the ground of those elements most needed for wheat. This is not the case with clover, peas, and other leguminous crops. So that on wheat land, and when the hay is to be consumed, as it always should be on the farm, I think the less timothy and more clover we can grow, the better

Clover impoverishes the soil less than timothy and makes richer manure.

I have always been in favor of summer fallowing for wheat, but it must be confessed that the practice belongs to rather a low state of farming. If land is well drained and is rich enough, and the hoed crops are cleaned as thoroughly as they should, it would seem, that with our splendid climate for mellowing the soil and killing the weeds, we could get along without letting our land lie idle. My summer fallow last year, reckoning a man and a span of horses worth \$4.00 a day—and during the busy season they are certainly worth that at present prices—cost me \$15.00 an acre. A summer fallow, by decomposing the organic matter of the soil, and rendering the latent "plant food" available—is equivalent to a dressing of manure; but it adds nothing to the soil, while \$15.00 worth of artificial manure would enrich it quite as much, and leave the latent plant food to be rendered available by the free use of the cultivator among corn, potatoes, beans and other hoed crops.

Three days ago one of my horses was taken sick at noon. I let him stay in the stable, thinking that it would pass off; but towards night he grew worse, and we gave him an ounce (two tablespoonfuls) of laudanum and an ounce of sulphuric ether. This relieved him, but the next morning the pains came on again, and I repeated the dose. This quieted him immediately, and he seemed entirely recovered, but towards night he grew very much worse, rolling on his back, getting up and down, and manifesting great uneasiness. I gave him another dose of laudanum and ether, with a quarter of a pound of glauber salts. The pains soon ceased, and he seemed quite comfortable; but the next morning he was seized with the pains again worse than before. I never saw an animal in such agony. I sent for a veterinary surgeon, but in the meantime gave him another ounce each of laudanum and ether. He was still in great pain, groaning piteously, and I then gave him two ounces of laudanum and two ounces of ether, and in addition held a handkerchief to his nose, moistened with ether, and set three men to rub his legs, ears, &c. The effect of the ether was magical. He lay perfectly quiet, ceased groaning, breathed naturally, and was soon "comfortably drunk!" By the time the veterinary surgeon got here he was nearly well. The doctor, sensible man, approved of my practice! He gave no more medicine, but administered an enema of blood warm water and soft soap.

Every farmer should have such a syringe. Any tinsmith can make one, and the cost is not more than a dollar. Had I had one, a couple of quarts of warm water and soap injected as soon as the horse was taken, would probably have cured him. If



not, an ounce each of laudanum and ether given every quarter of an hour till the pains ceased, would almost certainly have done so. It was nothing more than an ordinary case of spasmodic colic brought on by improper feeding—but by not being attended to promptly, may run into inflammation of the bowels. In either case there is nothing better than laudanum and ether given in doses of one or two ounces till the pains cease, and repeated whenever they come on again. In the case of inflammation of the bowels, it is not safe to give cathartic medicines. I say this on the authority of one of the best physicians in the State. Give enough laudanum every few hours to keep the bowels perfectly quiet, and Nature will effect a cure. Do not be afraid of the laudanum, and pay no attention to those who think you should give something to “clean out” the bowels, other than to administer an enema occasionally. Keep the horse warm and quiet, and let him eat nothing but bran mash, and oatmeal or corn gruel. Flax seed tea, if you have it, would probably be better still.

“How can you tell the difference between ordinary spasmodic colic and inflammation of the bowels?” It is not an easy matter for an inexperienced person to tell. In inflammation of the bowels the pain is generally not so severe at first, but continues all the time; while in colic, the pain comes on in spasms with intervals of quiet, and as it continues, the spasms last longer and the intervals of quiet become less frequent and of shorter duration. In inflammation, the ears and legs are cold, while they are warm in cases of colic, and the pulse is stronger.

Horses are seldom troubled with inflammation of the bowels, while spasmodic colic is one of the commonest complaints. Too much cold water, especially when the horse is heated, frequently brings on an attack. Over-driving, irregular feeding, exposure to cold storms, especially when the horse is tired, and above all, too much grain, are among the common causes of this complaint. New oats or new corn, if fed freely, is almost sure to produce it, and if it must be used it should be given only in small quantities, and bran given at the same time. I presume the cause of my horse's sickness is simply that he had been drawing corn from the field and may have been allowed to eat a few ears.

I will give my men the credit of taking good care of their horses. Of course they do not clean them as thoroughly as they should—few men do. There is not one farm horse in a hundred that is more than half groomed. A little curry-combing in the morning is frequently all the cleaning that horses get. I have seen horses brought home dripping wet and left for the night without as much as a wisp of straw being rubbed over them. If such men were

obliged to sleep in their wet clothes, they would perhaps appreciate the cruelty of their conduct. Most farm men seem to have a mortal dread of doing anything by candle light. If left to themselves they would at this season, quit work at five o'clock, water their horses as they bring them in, take off the harness, give them some grain and fill the racks with hay, bed them down and then leave them till half past five or six o'clock next morning! Shade of my forefathers, what would you say to such teamsters!

My Fluke potatoes are a poor crop. Last year on land not as good, I got 200 bushels per acre; this year they do not yield half as much. The experiments of Prof. Anderson prove that potatoes make most of their growth late in the season. Last year the summer was very dry and early potatoes were a failure. Had the dry weather continued a week or two later the whole crop would have been lost; as it was, the rain in August was just in time to benefit them, and we had a splendid crop. This year, the early part of the season was wet and potatoes promised to be an immense crop; but the severe drouth of August, just when the tubers should have grown the most, ripened up the Flukes prematurely, and a small yield is the result. The Peach-blow, which is a later variety and a very vigorous grower, withstood the drouth better, and the later rains were in time to help them materially. They will yield at least three times as many bushels per acre as the Flukes, growing in the same field.

I am digging them with one of Sayre's & Remington's Horse Hoes. I sent the front share to the blacksmith's, and had the point hammered down so that it “bites” pretty well and runs deep. The side shares I put forward till they were within an inch or two of the front share, making in fact a double mould-board plow. I put on two horses, one on each side the row, and it does the work “better than I expected.” But the fact is, I have used this cultivator so freely between the rows that the land is as clean and mellow as a garden, and on pulling up the tops four-fifths of the potatoes came up with them. It is a quick and easy way of digging, and is another proof that it pays to work land thoroughly and make it clean and mellow. “I am getting to boast a little.” Well, perhaps so—it is the fashion in this neighborhood. But it is a fact that there is scarcely a weed in the whole potato field. It had wheat on last year, and was so full of quack grass that I would not seed it down. I thought I would try the English way of killing it. I plowed it as soon as the wheat was off. Drilled in some strap-leaved turnips, cultivated and hoed them, and had a fair crop. After they were off I plowed the land again, and then in the spring we drilled in the pota-



toes with True's potato planter, and then kept the cultivator and horse hoe going as long as a weed was to be seen. There is apparently not a piece of quack in the whole field, and I believe the saving of labor in digging the potatoes alone will more than pay for all the cultivating.

Some one has sent me a pamphlet on "Our National Finances," in which the editors of agricultural papers are urged "to take concerted action upon this vastly important question, and give to their tens of thousands of patrons such advice as is suitable for the emergency." The author of the pamphlet says: "It is now openly proposed by the leading politicians and papers of both parties to reduce the price of farm produce, and the price of labor, by legislation." The way this is to be done is by funding the legal tender Treasury notes. There can be no doubt that reducing the amount of these notes in circulation will reduce the premium on gold and consequently lessen the price of farm produce. But to say that it is proposed to lessen the price of farm produce by legislation is mis-stating the case. It was legislation, by making greenbacks a legal tender for debts, and issuing more than the ordinary business of the country required, that nominally increased the price of farm produce; but if the law was repealed, and we should return to specie payments such action would not be reducing prices by legislation. It would simply be restoring things to their normal state.

Instead of withdrawing a portion of the Treasury notes from circulation this writer urges Congress to compel the Secretary of the Treasury to increase the amount to one thousand millions of dollars, and make them a legal tender. He thinks this would bring down the rate of interest, give us cheap money, stimulate trade, encourage manufactures and develop our vast agricultural and mineral resources. In short it would make us all rich. He draws a very pleasant picture of national prosperity, based on an irredeemable paper currency. He does not propose ever to redeem these bills. "Their beauty and utility" he says "consist in the proposition that they do not need to be redeemed any more than gold or silver," forgetting that gold and silver have an intrinsic value, as much so as wheat or any other product of labor, and their value is in proportion to the labor required to obtain them. But this is not the case with paper dollars thrown off from a steam printing press by the million.

That farmers need higher prices for their produce than they have hitherto received, there can be little doubt, but it is very questionable whether high prices based on cheap greenbacks would permanently prove advantageous. Those farmers who are in debt would be able to pay their debts in depreciated money, the creditor being compelled by law to take

this money, even if it is worth no more than thirty-five or forty cents on the dollar, as was the case less than a year ago. Of course what the debtor makes the creditor loses. There is, in a national point of view, nothing lost or gained. People have double the amount of money that they had, but it is worth only 50 cents on the dollar. But they *feel* richer, and this *encourages extravagance*. It is efficient *labor* alone that produces wealth. A prosperity based on anything else will sooner or later come to an end. It is true, however, that farmers need more capital. If the issue of more greenbacks would give us the money needed for under-draining and other agricultural improvements, without at the same time increasing expenses in a corresponding degree. I should be willing to see a thousand millions put in circulation. But it has not as yet had such an effect. The capital of the country has been employed in trade and speculation, while agriculture, the chief source of our wealth, has been neglected. What evidence have we to show that such will not be the case if we have a further issue of greenbacks. What we want is *stability*. As long as we have a currency that fluctuates from day to day, few people will be willing to spend money for permanent improvements. We all hesitate to put up buildings while nails are 9 cents a pound, and lumber \$18.00 a thousand, when there is no certainty that in a year from now they could be bought for half the money. It is so of underdraining, building fences, clearing up the land, purchasing implements and machines, buying stock, applying manure, or doing anything that will not afford immediate returns. Agriculture is *slow*. We can not get our money back for several years. We need abundant capital, but it should be *real* capital; it must not be money worth 75 cents to-day and only 50 cents a few months hence.

We had our first severe frost on Tuesday night (October 24.) The ice was a quarter of an inch thick, but it does not seem to have injured anything except heliotrope. My beds of Phlox Drummondii are still blooming freely and the Petunias are as showy as ever. The Asters (which last year kept on blooming later than any other flower except Chrysanthemum) have been out of bloom for weeks. The dry weather of August ripened up the seed prematurely. Mignonnette also ripened its seed early in August and I thought the beds were used up for this season; but we cut off the stems that were gone to seed, down to the ground, and the plants started again and a fine bed of this sweetest of all flowers could not be desired. I call Phlox, Asters, Petunias, and Mignonnette the "Farmers flowers," because they can be grown with little trouble. Nearly all the flowers we have this year were from self sown seeds. It is but little labor to set out the plats and *hoe them*—and nothing more is required. Our flower garden has been much admired, and this is about all that has been done to it.



## ASHES REMOVED BY CROPS.

You would confer a favor by giving a table of the weight of inorganic matter removed from the soil by the principal crops, say in 1000 lbs. of vegetable matter; also the weight of each variety of inorganic matter removed.

PEARCE BODLEY.

Louisville, Ky.

We have not space this month fully to comply with this request. We will give a few facts which will enable our correspondent to make out such a table for himself. One thousand lbs. of wheat contain on an average 16.7 lbs. of ash. This is the mean of 32 analysis. The same amount of wheat straw contains, (as the mean of 10 analysis,) 51 lbs. of ash.

One thousand lbs. of barley contains 23.4 lbs. of ash. The same weight of barley straw contains 53.6 lbs. of ash. One thousand lbs. of oats contain 29 lbs. of ash; and the same weight of oat straw

It may also be remarked that the greater portion of the ash of grain exists in the bran. Good wheat flour does not contain more than half of one per cent. of ash. If we assume that the 25 bushels of wheat make 1000 lbs. of flour, and that the bran, shorts, &c., are retained on the farm or purchased back from the miller, it follows that out of the 178 lbs. of inorganic matter taken from the soil in a crop of wheat and straw of 25 bushels per acre, only about 5 lbs. are really lost to the farm.

If nothing is returned, a crop of wheat robs the soil of 178 lbs. of inorganic plant-food; but when a good system of farming is adopted and where the straw, bran, &c., are taken back to the land in the form of manure, the soil only loses 5 lbs. of plant-food per acre. Good tillage on ordinary land will develop this quantity from the inert plant-food locked up in the soil.

	Potash.	Soda.	Magnesia.	Lime.	Phosphoric Acid.	Sulphuric Acid.	Silica.	Peroxide of Iron.	Chloride of Soda.	Chloride of Potas.
Wheat, grain (mean of 32 analysis),.....	29.97....	3.90....	12.30....	3.40....	46.00....	0.33....	3.35....	0.79....	0.09....	—
Wheat, straw, (mean of 10 analysis),.....	12.14....	0.60....	2.74....	6.23....	5.43....	3.88....	67.88....	0.74....	0.22....	—
Barley, grain, (mean of 10 analysis),.....	19.77....	3.93....	8.55....	2.58....	35.20....	1.03....	26.49....	1.43....	0.47....	—
Barley, straw, (mean of 8 analysis),.....	18.40....	0.65....	4.13....	8.08....	3.26....	2.13....	54.36....	3.33....	6.95....	—
Oats, grain, (mean of 7 analysis),.....	16.76....	2.49....	7.70....	3.92....	18.19....	1.29....	47.03....	0.64....	0.20....	0.14
Oats, straw, .....	19.14....	9.69....	3.78....	8.07....	2.56....	3.26....	48.42....	1.83....	—	—

51 lbs. of ash. Of Indian corn we know of no reliable analysis.

It will be seen that in all cases, straw contains much more ash than the grain. As a rule the more ash a plant contains the less nutritious it is. The per centage composition of the *ashes* of the above plants is given in the above table.

Our correspondent can ascertain from this table the amount of inorganic or ash constituents removed by a crop. Thus a crop of wheat of 25 bushels per acre, (1500 lbs.) and a ton and a half of straw, will remove 25 lbs. of ash constituents in the grain, and 153 lbs. in the straw.

In round numbers we may say that such a crop of wheat and straw removes 175 lbs. of inorganic matter from the soil. The particular ingredients removed are as follows:

	In the Grain.	In the Straw.	Total.
Potash, .....	7.49 lbs.	18.21	25.70
Soda, .....	0.97	0.90	1.87
Magnesia,.....	3.07	4.11	7.18
Lime, .....	0.85	9.34	10.19
Phosphoric acid,.....	11.47	8.15	19.65
Sulphuric acid,.....	0.03	5.82	5.90
Silica, .....	0.84	101.82	102.65
Peroxide of iron and loss,...	0.20	1.32	1.51
Chloride of sodium,.....	0.03	0.33	0.35
	25.00 lbs.	150.00	175.00

This calculation may be easily extended to the other crops. With the single exception of sulphuric acid (bones,) the straw removes more inorganic matter from the soil than grain. But in all good systems of agriculture the straw is retained on the farm and finds its way back to the soil, so that out of the 178 lbs. of inorganic matter removed from the soil, only 25 lbs. is exported from the farm.

FACTS ABOUT MILK.—Cream can not rise through a great depth of milk. If, therefore, milk is desired to retain its cream for a time, it should be put into a deep, narrow dish; and if it be desired to free it most completely of cream, it should be put into a broad shallow dish, not much exceeding one inch in depth. The evolving of cream is facilitated by a rise and retarded by a fall of temperature. At the usual temperature of the dairy 50° Fahrenheit—all the cream will probably rise in thirty-six hours; but at 70° it will perhaps rise in half that time, and when the milk is kept near the freezing point, the cream will rise very slowly, because it becomes solidified. In wet and cold weather, milk is less rich than in dry and warm. The season has its effects. The milk in spring is supposed to be the best for drinking, and hence it would be best for calves; in summer, it is best suited for cheese, and in autumn, the butter keeping better than that of summer, the cows less frequently milked, give richer milk, and consequently more butter. The morning's milk is richer than that of the evening. The last drawn milk, the "strippings" at each milking, and at all times and seasons, is richer than that first "milked," which is ever the poorest.—*N. H. Journal of Agriculture.*

TO START A BAULKY HORSE.—The *Ohio Farmer* says:—"Fill his mouth with dirt or gravel from the road, and he'll go. Now don't laugh at this, but try it. The plain philosophy of the thing is, it gives him something else to think about. We have seen it tried a hundred times, and it has never failed."



## AMERICAN IMPLEMENTS IN GERMANY.

J. H. Klippart, Secretary of the Ohio State Board of Agriculture, has been spending some months in Europe, and in an account of German agriculture, written for the Department of Agriculture at Washington, makes the following remarks in regard to the use of American implements and machines in Saxony:

"All the agricultural implements and machines of native invention are very heavy, and to me appear very awkward and bungling. The American implements are much admired and eagerly sought for, but the supply is exceedingly limited indeed. John Bull enjoys a sort of monopoly throughout the Prussian states, as far as I have been, and in Saxony, in the sale of agricultural implements and machines, and yet our manufacturers could soon drive him from this market if they would only establish agencies here to introduce the American Agricultural tools.

"Reaping and mowing machines are being introduced, but as yet the quantity is very limited, and the supply less. There is no use in sending any reapers here unless they at the same time are self-raker. What the Germans want, is our ash and hickory wood, our malleable iron; therefore, they prefer the American made machines, rather than to manufacture them here or in England. American plows are much liked and very popular in Saxony, but not the hundredth part of the demand can be supplied. John Bull has endeavored to supply this market, but the Germans very much prefer the American ones. Then our spades, manure forks, pitch or hay forks, and even down to household implements and tools, are sold as rapidly as they arrive, so that no stock remains on hand. A member of a heavy and very responsible firm in Dresden told me that he purchased all the American tools and implements that were for sale at the Hamburg exhibition, brought them home, and in a few days they were all sold; then he commenced sending orders to the manufacturers in America, but could not get more than one order in ten filled, or in other words, if he ordered ten dozen of any kind of implements, he could not get more than one dozen; he said that, notwithstanding the very high price in America, the insurance, freight, tariff in Europe, yet he could sell more American implements in a less time and with greater profit than he could of any other kind. Can we not manufacture enough in the United States to supply our own and the European demand? If we have not laborers enough, send over here to Saxony and induce some of the Saxony mechanics to go to America, and we will get a first-class population and set of workmen."

## CAN FARMERS MAKE BEET SUGAR?

The *Sorgo Journal*, which represents the sorgum sirup interest in the West, thinks that the beet is not likely to be extensively grown in this country for sugar, because the farmers cannot manufacture it themselves as they do the sirup from the Chinese sugar cane.

Admitting that this is true, does it show that the beet is less valuable than sorghum as a sugar producer? Can farmers make *sugar* from sorgum any easier or cheaper than they can from beets, and if so, why? That they can make sirup from sorgum easier than they can sugar from the beet or any other plant, is doubtless true, but this does not prove the inferiority of the beet or the superiority of sorghum.

But sugar was formerly manufactured in France and Germany by the farmers themselves, but when the tariff on cane sugar was reduced or removed, the farmers could not afford to make beet sugar and sell it at the price of the foreign article. As we understand the case, farmers found no difficulty in making the sugar, but simply in competing with the foreign article when admitted under a low tariff, or duty free. The cane sugar of the West Indies or of Louisiana, is manufactured on a large scale, with all the appliances which science and capital can furnish for avoiding waste and producing it at the lowest cost. When beet is grown on a small scale, it does not pay to put up such expensive machinery, and hence the system was introduced of putting up factories for the manufacture of beets purchased from the farmers. If we can send our milk to a cheese factory, there would seem to be no reason why we might not send beets to a sugar factory, and it would seem that if sugar can be made in Germany for eight or nine cents a pound, and afford a handsome profit, it might be made in this country as long as sugar brings anywhere near present prices.

The main reason, however, why we so frequently allude to this subject, and why we are so anxious to have beet sugar factories established, is that our system of rotation needs a root crop. We have now too many cereals and too few green crops. We can grow beets better than any other root crop. They will stand dry weather better than ruta bagas or turnips, and require far less labor in weeding than carrots or parsnips. Then, so far as enriching the soil is concerned, the refuse of the beets after the sugar is removed, is just as good as the beets themselves. The sugar removes nothing that robs the soil, or that is of any value as manure.

We say nothing against sorghum. If it is a profitable crop it will be grown; but as yet little sugar has been made from it, and it seems impossible that



it will ever be able in our climate to compete with the sugar cane of Louisiana. But the manufacture of sugar from beets is not a new, untried experiment. We have the experience of half a century to guide us, and it is a matter of surprise that the subject attracts so little attention.

#### NOTES FOR THE MONTH—BY S. W.

##### HORSE RACING.

THE races on Wright's Maple Grove course last week displayed much fast trotting. The highest prize, \$500, was taken by sorrel Dapper, the Auburn horse, five years old; he was raised in this county by Coriell, the horse fancier, and sold last spring for \$550; he has since won several thousand dollars; winning this race in 2.28, twelve thousand dollars is now offered for him? The last day of the course our village was enlivened by a great display of equine agility and beauty from the country, far and near. Every farmer with wife and family, in spring carriage, not as of old in the farm wagon; his fine gay horses in plated harness, dashing along as if they thought a slower motion would rank them among the shabby genteel. Joseph Wright, in his passion for equine excellence, has done the farmers much service by his example. Twenty years ago the horses in this region were either fat, slow and ponderous German Canistogans, or mongrel Yankees, of all gaits, but no symmetry or speed. Now, a homely-looking animal is as rare as a low-spirited, slow one; and it was said that the meanest horse on the ground could not be bought for less than \$200. If some of the harness and its plating looked as though it had been in the war, the fault was not in the horses, and it by no means checked either their spirit or speed.

##### THE GRAPE CROP.

The crop of Concord grapes was large and well ripened; but Isabellas have ripened very unevenly; many bunches are only half ripe with many shrivelled and green ones. Yet, on the south side of the arbor, exposed to the sun, and in the exposed peaks, they ripened well. It is said that the Delawares have done no better than the Isabellas, but the Catawbas though late, are ripening as well as usual. At Aurora, Cayuga county, where the ripening is still earlier, there is the same blight on the Isabellas, those vines doing best that were trimmed the least, and running from trellis to tree tops. Your subscriber, "R. P. K.," has already bought three tons of imperfect Isabellas at \$60 the ton, to distil into brandy, as the excise on such spirits is only 25 cents a gallon; thus making a saving of \$1 75 over spirits distilled from grain or molasses. Grape brandy-making will thus be profitable for years to come.

##### SURFACE MANURING.

A subscriber to the *Farmer*, in Ulysses, Tompkins county, and a masterly farmer to boot, wished me to say to you, that he demurs to John Johnston's surface manuring for the corn crop on a stiff soil. He prefers plowing in all his manure as green as possible. He had the largest and best field of ripened corn on the 2d of September that we had seen in a ride of thirty miles. Soil, a rich gravelly loam, with calciferous shale.

##### HIGH PRICES OF FARM PRODUCTIONS FAVORABLE TO IMPROVED FARMING.

*Vous avez beau*, as the French have it, in significant but unrenderable phrase, when you aver that high prices for farm products will induce the farmer to improve his farm; I have long noticed that the richer a farmer grows the more land he buys, and the more land he owns the less he improves it. Here is a farmer who got rich by his industry and exact economy on a fine farm; now when he has three farms, he is like the man who drew the elephant in a lottery; he can't make them either profitable to himself or creditable to the agricultural progress of the age; for he has learned only by suffering, that a good tenant is an animal yet to be born. Some farmers take their earnings West and buy wild land for the taxes to eat up; others, more canny, loan it on mortgage, or invest it in factory stock, government bonds, &c., but none but amateur farmers lay out much money in farm improvements, and we all know that such men rarely ever prosper by farming alone. If a farmer builds a fine house to please his wife and daughters, that is neither under-draining nor manuring, but a clog to both. 'Tis true that there is a great improvement in farming of late years, but this grows out of the dire necessity of the case, and not from any excess of capital to the farmer; when I first came into Cayuga county thirty bushels of wheat could be grown to the acre among the ponderous girdled oaks of the forest with no plowing, but harrowing only; then farmers only labored to clear the land, the virgin soil gave them the crops; now, farmers have to work and manure both to make their crops, hence the improvements in farming. Ask a farmer when he comes for his factory dividend, why he don't underdrain his fields, grow more clover and keep more stock, and he will tell you it costs too much, pointing to an amateur farmer who, does all this at an expense the increase ever fails to pay. As profitable as farming now is under the deplorable excess of the depreciated currency, a farmer may even succeed if he farms by proxy; but in all past years the pecuniary success of the farmer was only secured by great industry, economy, and good farm management, aided by the industry and self-denial of his family. As in the day of small things farm



ers cleared the land and got along without capital; now their descendants have a traditionary aversion to invest capital in farm improvements.

#### DISCUSSION ON THE MANAGEMENT OF PASTURE-LANDS AT THE LATE NEW YORK STATE FAIR.

X. A. Willard, of Little Falls, gave a lengthy, conclusive argument in favor of suffering old pastures to remain for a long series of years without breaking them up and re-seeding. But Mr. Geddes, and others of the grain-growing regions, made quite as conclusive an argument in favor of breaking up and re-seeding their grass lands every few years. E. H. Peterson, of Seneca county said, he re-seeds his pasture lands every three or four years with timothy and clover; that the meadows therefrom give from two to two and a half tons of hay to the acre; it is so heavily seeded that a good heavy growth is had the first year, and if it lies three years, white clover comes in and takes the place of the red clover. But Mr. Peterson's farm, though profitable for meadows, is any thing but a grazing farm proper, the spring and early summer rains give good early pasture and a bountiful hay crop, particularly red clover; but after harvest, the hot dry weather dries and cracks the soil, and pastures are naught; the white clover he speaks of, will not compare with the tall white clover of those grass regions on which the rainy belt slops over so often during the summer, that a drouth there is a rare phenomenon. Mr. P.'s farm is picturesquely situated on the west shore of Cayuga Lake, opposite the village of Union Springs. It is a stiff calcareous clay farm, capital for wheat and red clover, descending very gently from its western limits to the lake shore; I once saw the wheat crop there yellowing ready for the harvest in the midst of the largest and tallest girdled white oak trees.

Watérloo, October, 1865.

POTATO TOPS AS A TOP DRESSING.—In *Flint's Grasses and Forage Plants*, it is stated that a practical farmer who raised early potatoes for market was in the habit of drawing the tops before they were dead, early in August, on to his mowing land and spreading them on the grass with very great advantage. He found the tops from an acre of potatoes sufficient to top dress an acre of mowing land, and the effect was equal to three or four cords of good manure.

THE Nashville *Press* says that cholera among cattle, which generally precedes cholera among the human race, is prevailing throughout Tennessee. Cattle and hogs are dying off at a fearful rate, and a few cases closely resembling cholera have occurred at Memphis.

DEFER not till the evening what the morning may accomplish.

#### TOP DRESSING FOR LAND.

WHEN I commenced farming on my own hook, about thirty-five years ago, it was the practice of farmers to haul out all the manure in the spring of the year, spread and plow it under from six to eight inches deep, for as Poor Richard says: "Plow deep while sluggards sleep, and you shall have corn to sell and keep,"—which, by-the-by, is better rhyme than reason. I soon learned from practice and close attention to the subject of manures, that I was wasting my capital, although it was recommended by Judge Buell, of the Albany *Cultivator*, and other agricultural journals of that day. We abandoned the practice and immediately changed our base of operations, and adopted a new line of policy—let the manure lay over summer in the yards to ferment, rot, and ripen, and in the autumn, when or about the time the fall rains come on, draw it out and spread it evenly on the surface of pasture or meadow. And from that day, thirty years ago, to this, I have used the manure produced on the farm entirely for top-dressing on meadows, mostly with the most satisfactory results. And now at this distant day, it gives an old farmer delightful emotions to see his notions of farming adopted, although at that day, thirty years ago, thought to be altogether utopian. But to-day through the influence of the guarding spirits of agricultural progress, it is becoming popular with the best farmers of the State and nation.

Mr. Johnston, of "Near Geneva," of world-wide usefulness, says in the *Genesee Farmer*, "I have used manure *only* as a top-dressing for the last twenty years, and I do think one load used in that way is worth far more than two plowed under." Friend Johnston, you are right, and we thank you for those words, for they are timely and fitly spoken. Mr. Dickinson and many others endorse the practice, which many meadows through the State begin to show. When I commenced farming before top-dressing my meadows, I mowed about the same number of acres that we did this year—made one small stack and filled the barn up to the collar-beam, all told about five tons. After the lapse of thirty years of top-dressing, we have cut on the same number of acres hay enough to fill three barns, build four large stacks, in all forty tons against five tons before manuring; and the aftermath now on the ground (September 5th,) will make more hay than all the crop of those years before manuring. The time to top-dress is in early autumn—the amount per acre as much as you please, if you have it. On land newly seeded, the first or second year is the best time according to my experience. And I think the agricultural papers are generally adopting the practice, which we are very glad to see. Gentlemen, you are right, "keep it before the people, as the politicians say.—"*L. P. L.,*" in *Country Gentleman*.





THE ALPACA.

## THE ALPACA.

EDITORS GENESEE FARMER—I would like to know if alpacas would do well in the United States? I saw in a Chicago paper that the authorities at Buenos Ayres, in South America, offer to furnish the United States Consul with 300 head, at a very low figure. What do you think it would cost to bring them to this country? It is said they shear eighteen pounds of nice fine wool, worth \$1.50 per pound. If this is so, would it not pay to import a few to this country? Let us know through the *Farmer* what you think of them, and if they would thrive in this country?

DAVID HUMPHREY.

Spring Creek, Cass County, Indiana.

We see no reason why the alpaca should not thrive in this country. It is one of the hardiest of animals. It is a native of the Andes where hail and rain fall almost incessantly for half a year, while during the other half, the nights on the high peaks where the alpaca picks up its scanty feed are very cold.

We believe the alpaca has never been introduced into the United States. In 1857 or 1858, seventy-two llamas (of which alpaca is a species) were sent to New York from Peru, thirty-four died on the passage or soon after landing in this country. The others were put up at auction, but only \$98 per head was bid for them and they were withdrawn. What became of them we do not know. Some of them were shipped to Australia.

These llamas, it was thought would prove useful in the Rocky Mountains, as beasts of burden as well

as for wool. They are larger animals than the alpaca, and are employed by the Indians to carry burdens on their backs in rough and mountainous regions where other animals could not travel. Their wool is not so fine as that from the genuine alpaca. This wool was not known, or at least not in England, till about the year 1832. W. WALTON, author of "*The Alpaca: its naturalization, &c., in Britain,*" says:

"A commercial house in Liverpool, noticing the growing demand for alpaca wool, in 1832, directed their agents in Peru to purchase all they could; but so little was it then known there as an exportable article, that in 1834 no more than 5,700 pounds were shipped at \$16 per cwt. Next year 184,400 pounds were shipped at \$18; and in 1836, 199,000 pounds at \$23. In 1838, 459,000 pounds were sent over, and the price rose to \$25, and the next year to \$30. Till 1842 alpaca wool was not distinguished in our imports, but in that year we imported 299,432 pounds; in 1843, 1,458,032 pounds; and in 1844, 635,357 pounds; in 1845, 1,261,905 pounds; and in 1846, from Peru, 863,602, and Chile, 690,685 pounds; in all, 1,554,287 pounds.

"In these quantities there was usually some inferior wool, cut from the *machurga*, or hybrid, between the llama and alpaca, but good qualities have generally realized from 2s to 2s 6d per pound. Till the period above designated, this commodity was never brought down from the Andes for sale, being wholly consumed by the Indians themselves; but as the supply for the last five or six years has been carried to its fullest extent, the small quantity obtained would argue an enormous decline in the



number of sheep, even estimating them at only 8 lbs. of wool each, while the advance in price must have been a sufficient temptation to the grower to sell. Lately great efforts have been made to collect this wool, but as the growth is chiefly the work of Indians, and their attention is besides diverted to other pursuits, it is thought that the annual supply can not exceed 2,000,000 lbs.

"If, therefore, the call for alpaca goods continues to rise in the same proportion as it has lately done, a sufficiency of the raw material can not be obtained from Peru; or should those intestine wars be renewed, which have been carried on so long between the highlanders and lowlanders in that country, the supply would be rendered precarious, if not impossible. Besides, it must not be forgotten that alpacas are reared only by Indians, whose numbers have decreased to so frightful an extent, that it would be no matter of surprise if, before the next fifty years expire, their few remaining pastoral establishments were broken up, and that valuable production lost to commerce, which our consumption of it brought into notice."

Mr. Walton gives a history of the introduction of alpacas into England. It appears that parties at different times brought over a few of these sheep generally as a matter of curiosity. Mr. W. says:

"Mr. Cross's alpaca, exhibited in London, and other places, from 1810 to 1816, was the first specimen seen among us, and much admired. It was eleven or twelve years old when it died, and then the wool upon it was eighteen inches long. About the same time, the late Duchess of York had four or five alpacas and llamas, at Oatlands, as pets. In 1817, Mr. Bennett, of Farringdon House, Berks, received a pair of alpacas, which he fed as he did sheep, and from this stock, in 1844, he had reared fifteen. In 1825, Viscount Ingestrie brought home, in his frigate, a pair of alpacas, which stood the voyage well, and the female, after arrival, had the usual annual increase. Mr. Thomas Stevenson, of Oban, Argyleshire, towards the year 1830, procured some stock, and had, on his own estate, eleven births. Mr. Robert Hegan, a Liverpool merchant, tried the experiment, and it was his little flock that ultimately passed over to Ireland. Mr. Edwards, of Pye-nest, near Halifax, in Yorkshire, in 1839, imported six alpacas, and two vicunas; and other names might be mentioned, as having at least set an example, among whom is Mr. Charles Tayleure, of Parkfield, near Liverpool.

"These several experiments, however, it will readily be conceived, produced no results as regarded the main object in view, viz: to stock our mountain wastes. Whalers and trading vessels from the Peruvian coast continued occasionally to bring over

a few alpacas each, or animals sold and shipped as such, but often injudiciously selected. They arrived chiefly at Liverpool, as presents, or as the captain's adventure, and being considered rather as curiosities and objects of natural history, than valuable farming stock, were dispersed at home, or sold to go to the continent. The few retained were bought for gentlemen's parks and paddocks, or for zoological gardens and traveling shows. Nobody seemed to think of breeding the alpaca as farm stock, capable hereafter of peopleing our useless hills, and serving as the basis of a growing manufacture. Struck with the importance of this idea, and, at the same time, sensible of the great ignorance which prevailed as to the means by which it might be realized, in the early part of 1843, a spirited commercial house ordered a given number of alpacas to be bought in Peru, and shipped under specific instructions. The captain entrusted with the embarkation took on board 254 female alpacas, purposely selected in the eighth month of their pregnancy, accompanied by twenty males, and provided with suitable provisions. Unaware of the consequences, he had previously filled the lower hold of his vessel with guano, placing the live stock in the 'tween decks. When doubling Cape Horn the guano heated, and the effluvia, loaded with ammonical and other strongly deleterious properties, rising progressively in a stronger degree, suffocated the poor confined creatures above, but not until the greater part of the females had given birth to their young, some of them prematurely; and when the vessel was reported at the Liverpool custom-house, on the 15th of April, 1843, four only were left alive, and these were almost useless. Thus, through an act of inadvertency, perished the first cargo of these interesting animals ever attempted to be brought to our shores.

"Experience has, in fact, proved that we can not possess genuine and sound alpaca stock, if the shipment is left to chance, or to the selection of a captain, who has room for half-a-dozen, or a dozen, on deck. Frequently he is deceived, both as regards age and breed, purchasing such only as accident or design may have placed within his reach. In some instances the *machurga*, as before stated, a cross between the llama and alpaca, and a sightly but barren hybrid, was brought over; while, in others, specimens were shipped in a diseased state, or too old to be serviceable. Alpacas, destined for stock in this country, should be purchased in the interior by judicious persons, all of them under two years old, and placed in a depot previous to embarkation, where they might be fed upon dry food, as a preparation for the voyage. As these animals require a particular mode of treatment, each large shipment should be accompanied by an intelligent Indian



shepherd, accustomed to their habits and diseases." As to the cost of bringing alpacas from Buenos Ayres to New York we can not give definite information. There is now a line of steamers running from New York to Buenos Ayres, and it would seem that there can be little difficulty in bringing the animals. The most important point is to be sure that the animals are of the right kind. That they would thrive in this country there is no reason to doubt, and that they would prove profitable is highly probable. There is an increasing demand for alpaca goods at high prices.

#### GREAT YIELD OF POTATOES.

"ABOUT two years ago the late Chauncey E. Goodrich sent us twenty of the new varieties of potatoes which he had originated. On experimenting with them four sorts were selected as being the most valuable. Three of these have been since named the early Goodrich, Gleason and Calico. The fourth is known as No. 310. The quantity of seed having been much increased, we were enabled the present season to give them a trial on a more extended scale. A field, the soil of which was a strong fertile loam, of uniform quality, was selected for the experiment. It had been formerly occupied with nursery trees, which had been cleared off a year previously, and a moderate dressing of stable manure given. The potatoes were planted in rows four feet apart, with single pieces dropped about twenty inches apart in the rows. In the same field and on similar soil, were planted the Prince Albert, Early June, and Buckeye potatoes. The following figures, omitting fractions, give an accurate measurement of the products:

Early Goodrich yielded	311	bushels	per	acre.
Gleason,	do	259	do	do
No. 310,	do	259	do	do
Calico,	do	207	do	do
Buckeye,	do	194	do	do
Prince Albert,	do	130	do	do
Early June,	do	86	do	do

Had the rows been placed three feet instead of four feet asunder, they would probably have yielded as much in the row, and produced one-fourth more per acre—Early Goodrich giving 415 bushels per acre, Gleason 324, and Calico 258. In this same field, eight years ago, but with higher manuring, Prince Albert yielded at the rate of 375 bushels per acre. This variety seems to have diminished in productiveness.

None of these are nearly as productive as the Cuzco, which yielded 540 bushels per acre last year; but they were so poor in quality as to be unfit for the table, and we used them for feeding horses. The previous year they were much better, but we have discarded their cultivation.

The three sorts named here, namely, the Calico, Gleason and Early Goodrich, are fine for the table,

and will be liked by all those who prefer a mealy potato. They are all better than the Buckeye. The Goodrich is quite early; the Gleason a late variety. Under all circumstances we should probably select these two as the best for general culture. No. 310 does not cook uniformly soft. None of these sorts showed any indications of rot during the present year.—*Country Gentleman*.

Such experiments as the above are of great interest and importance. It is very unusual for an early potato to produce a large crop, and yet the Early Goodrich, which we believe is the earliest of the four varieties of Mr. Goodrich's seedlings that were used in this trial, produced the heaviest crop. It gave 311 bushels per acre, while the Early June produced only 86 bushels.

The fact that the Prince Albert potato yielded 375 bushels per acre in this same field eight years ago and only 130 bushels this year is interesting, and shows the importance of a frequent change of seed, or of planting new varieties.

We have headed this article "a great yield of potatoes,"—which is not the heading given by the experimenter. Crops of three hundred, four hundred and five hundred bushels of potatoes to the acre are certainly very uncommon.—EDS.

SCOURS IN CALVES.—A correspondent of the London *Agricultural Gazette* states that acorns ground into meal are a cure for diarrhoea in calves. He gives a pint of the acorn meal and a pint of bran or oatmeal mixed with milk and water to make it palatable. One such dose stopped the worst cases. He has also tried it, and so have his neighbors, for scours in horses, cattle and sheep with perfect success. Horses and cattle of course require a larger dose, say two or three quarts.

In mild cases of scours in sheep we have found nothing better than milk porridge—say a tablespoonful of wheat flour boiled in a pint of sweet skimmed milk to each sheep. Repeat the dose night and morning till the disease stops. It is better to mix the flour with a little cold water or milk, and stir it till it is quite smooth and all the flour is mixed with the water. Put the milk on the stove and when nearly boiled pour in the flour and water, stirring it to keep it from getting lumpy or burning. Let it boil for a few minutes till the flour is cooked. Such porridge well made is good for man or beast, and not bad to take. Why it is not more commonly used in farmers' families where there is plenty of sweet skimmed milk we can not imagine.

"PEA straw is richer in oil and albuminous, or flesh-forming matters, than the straw of the cereals. The woody fibre is also more digestible. This fully accounts for the repute in which it is held as fodder for sheep and cattle."



## STOCK AND DAIRY vs. WHEAT.

THERE is much good sense in the following article; which we copy from the last number of the *Western Rural*, published in Detroit. We have always thought that the farmers of the West would sooner or later find it to their interest to keep more stock, and sow a less area of land to wheat, for the simple reason that, so long as the Atlantic cities are the market, it will cost much less to send a *hundred dollars worth* of beef, pork, mutton, wool, cheese and butter to market than a hundred dollars worth of wheat or corn. Sixty pounds of wool worth \$36.00 can be sent to New York for about the same cost in freight as a bushel of wheat worth only \$2.00. The freight from the West gives farmers in this section a kind of "protective tariff," and this is much higher on grain, than on meat, wool and dairy products.

"Michigan farmers have a mania for growing wheat, while they too much neglect other important and profitable farm products." In 1860, Michigan produced 8,313,185 bushels of wheat—a little more than one-twentieth of the whole amount grown in the United States. Of cheese in the same year it produced only 2,009,064 pounds. The little State of Vermont, with an area about two-elevenths as great, produced 8,077,089 pounds of cheese, but only 431,127 bushels of wheat. That Vermont did not grow so little wheat because her soil is not adapted to wheat culture, is shown from the fact that the average yield of wheat per acre in Vermont, in the year 1864, as shown by the Report of the Department of Agriculture for January, 1865, was fourteen bushels per acre, while in Michigan the average yield per acre for the same year was but twelve bushels. Thus it is seen that although the farmers of Vermont can grow fourteen bushels of wheat on the amount of land from which Michigan farmers get twelve bushels, yet the Vermont farmers prefer to give attention to dairy products to the almost entire neglect of wheat. Why is this? Evidently because they find dairy farming the most profitable.

"Michigan farmers do not manufacture cheese enough to supply the home market, but give their labor and land to the production of but twelve bushels of wheat per acre. In the early days of the State, when wheat was almost the only article that brought the farmer ready money, when it was a sure crop, when the soil was a virgin one, and when most farmers possessed but little capital, there were doubtless good reasons why wheat should be grown almost exclusively, but we are convinced that those reasons are not now so strongly in force, and that there are other and strong reasons why our farmers should give greater attention to dairy products and stock.

"We do not object to the growing of wheat *per*

*se*. It is one of our most valuable crops. When a proper rotation is pursued it can scarcely be dispensed with. We hope the time will never come when it will not give remunerative returns. What we do object to, is the great attention given to wheat growing to the exclusion of other branches of farming which are as profitable as wheat-growing, or more so. As we said above, our farmers have a mania for growing wheat, a mania which they pursue to such an extent that their lands grow less and less fertile from year to year. Growing wheat as most Western farmers grow it, is a continual draught on the resources of the soil with no adequate return, and however rich a soil may be at first, it will in time deteriorate under such usage. Clover and plaster are the principal fertilizers on most wheat farms. When their use is continued for a series of years the farmers begin to complain that their land is 'clover-sick' or 'plaster-sick,' that it will not give profitable returns. Land so treated will inevitably give out. It is every year deprived of many of its most valuable constituents in the crops of wheat which are taken off—constituents which are by no means fully returned in the fertilizers, clover and plaster. That our lands are losing their fertility we see in the fact that they now produce less per acre than the naturally poorer soil of the Eastern States, for in those States such an exhausting system of cropping is not pursued.

"Now, by giving to wheat no more than its due share of attention, by keeping a large portion of land in meadow, and pasture, and root crops, and feeding the produce to animals either for the dairy or the shambles, farmers will surely reap as large immediate returns as when wheat is the main crop—and we believe much larger—and can, by aid of the large amount of manure which they will manufacture, keep their land in excellent condition. Michigan possesses a soil well adapted to the production of the most nutritive grasses; it is well supplied with pure water; it is closely connected with all the great markets of the country by lakes and canals and lines of railroad. Possessing such facilities for the dairy and stock business, is there any good reason why it should not assume rank as one of the greatest dairy and stock regions in the Union? Would not our farms be more fertile, our farmers wealthier, and our State more prosperous if more animals were raised and less wheat?"

THE *Scottish Farmer* shrewdly says: "Mr. Mechi may persuade himself that he is in the secret of converting considerable quantities of straw into beef, but we rather suspect it is the straw which renders him capable of extracting nourishment out of the large allowances of concentrated food which he makes use of."



## CIRCULAR TO SHORT HORN BREEDERS.

WE have received the following circular letter from Lewis F. Allen, by the editor of the American Short Horn Herd Book, and hope it will receive the immediate attention of short horn breeders:

DEAR SIR: Discouraged by the ill success of sales in the last (6th) volume of the American Short Horn Herd Book, from the failure of the usual number of subscribers to take it after publication, I concluded to suspend any further labors in that line for the present. But, the period of nearly three years from the compilation of the sixth volume having elapsed, and receiving numerous applications from the more spirited among our Short Horn Breeders to go on with the work as before, I have concluded to receive pedigrees for volume seven, to be issued as soon as they can be received and compiled in sufficient number.

If, therefore, you wish the pedigrees of your Short Horn Cattle recorded, you will please forward them to my address as soon as you can prepare them—at all events not later than the first day of December next.

The form of making out the pedigrees for publication is so generally understood by reference to the previous volumes of the Herd Book, that no further instructions are now needed—so that they be plainly written in the usual form, on one side of the paper only, and the necessary references distinctly made out for publication.

## TERMS:

1. For every pedigree recorded, the charge will be one dollar, to be remitted with the pedigree.

2. The pedigree of every bull occurring by name in the lineage of the animal sent for record, if not recorded in either the American or English Herd books, must be sent for record, and for which the same charge of one dollar will be made. Such bull will be recorded by number in this volume, so that the lineage of every recorded animal can be complete without further question. If any of the bulls referred to in your pedigrees have an *English* number which you wish to insert, and also a number in any previous volume of the American Herd book, send the American number with it, so that those who have only the American Herd book may see it.

3. State name, color, age, and sex of the animal; also the name of the breeder and owner, and his Post Office address.

4. State, with the list of pedigrees you send, the number of copies of the seventh volume you wish to subscribe for, the price of which will be \$6 each per copy, *paid in advance when the pedigrees are sent.*

5. I will *print and insert* well executed cuts of animals, (the cuts being furnished and sent to me

without expense on my part, as usual) at \$7 each for the whole number of copies printed of the book.

6. I will *bind* in the book furnished to me, as above, good lithograph portraits of animals, at \$3 each.

I shall endeavor to have the book<sup>3</sup> ready for delivery as early as possible after the pedigrees are all in.

7. I shall print very few extra copies of the book beyond what is subscribed and paid for—and *those extra copies will be held at an increased price.*

The good faith with which I have complied with all my previous engagements of the kind, and my own personal responsibility, in case—for any cause—of my non-compliance with this will be a sufficient security against risk to those who patronize the work.

In the event of any occurrence by which the book shall not be issued, the money advanced for recording the pedigrees and the book, will be refunded. Those who at all appreciate the number of contributors to the work—the small comparative amounts which they pay—and increased expenses of every thing connected with a work of this kind, (nearly double what it was four years ago,) will concede the propriety of the course which I pursue. It is not that I distrust any gentleman, but it is due to myself that I thus advance my terms of registry and publication. A response at your earliest convenience is requested.

As I shall send out the books as soon as they are printed, please say whether you wish them by mail or express. If by mail, send the advance postage, 40 cents per copy, as I shall prepay it.

LEWIS F. ALLEN.

Black Rock, N. Y., Sept., 1865.

PEARS have been so abundant in England, this year, that they have been sold at the rate of "4 lbs. for 2d." They have been cheaper than potatoes. With us good pears are worth ten cents a pound—or *ten times* as much as in England. But in England they have no pear blight.

THERE are said to be underground creeks in the limestone regions of Georgia with current of sufficient velocity to carry a mill.

RULES FOR PURCHASING BEES.—Select two year old stocks of large size, that swarmed the previous year. It has been demonstrated that such stocks have young and vigorous queens, and are generally well conditioned, promising a healthy generation. A very old stock should be rejected, for they will be found of small size and insignificant in numbers.—*Flander's New Bee Book.*

CONFESSION of a fault makes half amends for it.



## THE ROTHAMSTED WHEAT CROP FOR 1865.

MR. J. B. LAWES has a field of about thirteen acres, where he has grown wheat *every year* for the last twenty-two years, divided into plots, which are dressed with different manures, and the produce of which, both of wheat and straw, is accurately measured and weighed each year. There is doubtless no field in the world in which there is such a variety of *known* conditions, and each year adds additional interest to the results. The crop of 1865 has just been thrashed, and Mr. Lawes has published a few of the results from five of the plots, viz: the plot which has received no manure for twenty-two years; the plot which has been manured each year with 14 tons of barn-yard manure; and three plots which have received different amounts of artificial manures. The results are published with special reference to the influence of the past season on the wheat crop of England. The season of 1863 (especially,) and also of 1864, were remarkably favorable for the production of wheat of good quality. That of 1865, as shown by the results given in the following table, while far less favorable than the two previous years, is much better than the average.

Plots.	How Manured Each Year.	Harvests.			Average of 13 Years 1852—1864.
		1863.	1864.	1865.	
Bushels of Dressed Corn, per acre.					
3	Unmanured.....	17¼	16	13¾	15½
2	Farm-yard manure.....	44	40	37¾	35¾
7	Artificial manure.....	53½	45¾	40¼	37½
9	Ditto.....	55¾	49¾	43¾	38¾
9	Ditto.....	55¾	51¼	44	35¾
Weight per bushel of Dressed Corn.					
3	Unmanured.....	62.7	62.0	60.6	56.9
3	Farm-yard manure ....	63.1	62.5	61.5	59.6
7	Artificial manure.....	62.6	63.1	61.6	58.8
8	Ditto .....	62.3	63.5	61.4	57.8
9	Ditto.....	62.1	62.6	61.1	57.5

"Dressed corn" simply means, wheat dressed, or winnowed, ready for the miller. It is certainly a remarkable fact that land no better than the ordinary wheat-soils of Western New York should produce, on the average, for twenty-two years in succession, without manure of any kind, some fifteen bushels of dressed wheat per acre. There are many farms in this section on which 15 bushels of wheat ("thrashers' measure") is more than is produced under the ordinary system of rotation and manuring. Now, we will not say that we can raise as large crops in this country by the aid of manures as can be raised in England. We have always thought that we could; but be this as it may, there is no reason to doubt that 20, 25 or 30 bushels per acre cannot be raised here as easily as in England. The fact that on an average, we do not, even in this, the best wheat section on the continent, produce more than land can be made to produce every year in succession, *without manures*, proves conclusively that we do not *work our land* as we should. *Good tillage alone*, once

in three or four years, certainly ought to give us far better crops than we now obtain.

We do not advocate growing wheat every year on the same land. Neither does Mr. Lawes. He grows it merely as an experiment. In his ordinary farming he grows wheat only once in four or five years; and we may mention that his crop this year on four fields was, on one field 38 bushels per acre, on another 48 bushels, on another 48, and on the other 51 bushels per acre. It will be observed from the above table that he has grown by the use of artificial manures alone, over 55 bushels of dressed wheat per acre, weighing over 62 pounds per bushel. This was 38 bushels per acre more than on the plot which was unmanured. While these experiments show, therefore, that good tillage alone will enable land to produce every year as much wheat as we ordinarily get from our land once in three or four years, they also show how much more can be obtained by the liberal use of manure.

## GROWING TIMOTHY SEED.

"To grow timothy seed for a crop, it should be sown with fall wheat. The wheat being harvested in due course, the land is not pastured, as the cattle and sheep greatly injure the timothy. The next spring, it must be allowed to grow up, still without pasturing in any way, and stand till the timothy seed is ripe. It is then cut and thrashed and cleaned through timothy seed sieves. The plant is most productive of seed near the borders of small creeks, and in wet places. It should not stand too thick, as whenever thick, the seed is not so fine.

"In threshing with a machine, you are apt to hull the seed, and this spoils the beauty of the sample although it does not injure the seed, for hulled seed grows as well as that which is not hulled. This is now understood, and merchants do not so much object to the hulling. In former times, it used to be condemned on that account, and was, therefore, then threshed altogether with the flail.

"The average product of cleaned seed is from five to five and a half bushels per acre, which at the present price per bushel, pays as well as a middling crop of wheat. It is sold by weight, forty-eight pounds to the bushel.

"The hay from threshed seed is far better than straw, although, of course, not so good as from green cut grass. We have little doubt that the hay from threshed timothy seed might be profitably used by the paper makers. It must have a tougher and better fibre than straw; at all events it is worth a trial."  
—*Canada Farmer.*

THE potato blight has appeared in the Isle of Wight, England.



## LETTER FROM PHILADELPHIA.

A LIGHT WHEAT CROP—NO APPLES—GREAT CORN AND NO NUBBINS—MONITOR POTATOES—A NEW WEED—A HOME MADE CLOVER HARVESTER.

PHILADELPHIA, OCTOBER, 1865.

EDITORS GENESEE FARMER—While in all this region the wheat and apple crop of the present season has been; the first, an unusually light one, and the latter next to nothing, Nature, almost always just in her laws of compensation, has given us on both sides of the Delaware, from the salt water regions to the mountains, such fields of corn as our farmers have never before harvested. A very remarkable feature of our corn fields this year, both in Pennsylvania and Jersey is, there are no "nubbins." I have topographized at least one hundred corn fields since the crop has ripened, and I do not believe that all of them would afford a single one-horse cart load of *pig corn*. I have found three farmers seriously in trouble, wondering what on earth they were to make pork with—could'nt think of feeding those great golden ears of merchantable corn to the hogs.

I should be glad, with your permission, to give you at another time, a few specialties of some of our Keystone farmers within ten miles of Philadelphia; but at present prefer to report a phenomenon—ask for a bit of information, and respond to a request of your own made in last month's issue of the *Farmer* in relation to a clover seed harvester.

My phenomenon is a *lusus naturæ*, or *lusus* potato, or a queer thing, such as I have never seen or heard of in the potato line.

About the 10th of last month, Samuel Morton, Esq., one of our model Philadelphia county farmers, was showing me over his domain, and in our rambling we came upon a field of Monitor potatoes.

"Now, friend Cosmo, I will show thee the 'Monitors' that we build out here in the country."

So our friend set to with his hands and scratched two hills as deep as ever potato ought to burrow; but not a monitor did he turn out. He did turn out two hives of queer insects, however, such I have never met before. In form and color they were very like cockroaches, but they were not cockroaches, and not above half an inch in length. They were combative fellows, biting like the great red ant, as my experience in attempting to examine them proved.

The stout vines which Mr. M. had pulled and thrown aside, attracted my attention, and there I discovered the phenomenon. All of the root was an elongated, hard, fibrous tuber, nearly two inches in diameter, cut into cells like a honey comb, and all alive with baby bugs of this, to me, unknown family. Can you tell me what it is? Can any one? Is it possibly the first colony of some new potato pest?

Next after the queer perforated tubers, we came to the *Monitors*. All along up the main vine, and on all its branches, set like tomatoes, were great numbers of small potatoes varying in size from the dimension of a small pea to that of a pigeon's egg. They were all

perfect potatoes in every feature, only they were a yellowish green, and every one of them had one or more perfectly developed tufts of bright green foliage in miniature, springing without shoot or stem, from the surface of the tuber, each little tuft having from three to six perfect leaves.

I consigned a handful of the singular tubers to a box of rich earth, brought them home, and have since had them under daily observation. Several of them have already exhibited rather strange antics, which considering their origin may be all consistent enough, though I understand nothing of the philosophy of the thing.

Two of the largest tubers have increased their size about one-third, and nearly covered themselves with as beautiful and perfect little white potatoes—about the size of a large marrowfat pea—as was ever seen; without a sign of shoot, root, or sprout about the mass. Three of them have shot up some four inches on a stocky greenish foot stalk, exactly as a bean comes out of the ground; the original tufts of foliage having expanded so that the breadth of leaf is at present about half an inch.

The remainder that have broken ground, have sent up the original shoots that were uncovered, and now average about six inches in height, knotted and nubbed at every half inch with the little protuberances, already taking on the form and features of the originals. If anything comes of the experiment, and I shall succeed in maturing a crop of these monstrous "Monitors," I shall certainly send you a sample as a curiosity.

Now to the interrogation point.

The specimens of grass, or vegetable "What-Is-It," that I send herewith, was cut from a wheat field that at harvest time was as clear from all kinds of grass as any field I ever saw, and at the present time the whole field of more than twenty acres, is covered with a crop of the singular material, quite a foot in height, and standing as thick as ever you saw timothy in a six year old meadow. It is not confined to that wheat field, however. I find it dispensed liberally over a rather wide range of territory, springing up in meadows, pastures, gardens and corn fields. I was greatly surprised that very few of our farmers had noticed its intrusion until their attention was called to it, and then they were confident they had never seen anything like it before. I know I never have. We don't know anything about it this way; neither do our stock—horses, horned cattle or sheep; and they seem obstinately opposed to becoming acquainted with it, for not one of them will look at it.

It has a tough, fibrous root; two long, lance-like leaves springing out from the surface, of a bluish green, a round wiry stem, and a nondescript upper structure, as you see by the samples—more like the foot of a Dorking chicken than anything else I know of. Is it the famous "witch grass" of which we have read so much in northern agricultural journals of late, or is it a new vegetable. "What-Is-It!" We, along the Delaware, would like to know what it is, and what we shall do with it.

About that clover seed harvester—I think I can put "D. G.," of Coesse, Indiana, or "any other man" in



the way of achieving a cheap, durable, home-made harvester that will do the work satisfactorily. I built one, such as I shall attempt to describe, which performed beautifully for sixteen years, to my certain knowledge.

Make a platform of tough, white poplar, or some light tough wood, the stuff three-fourths of an inch thick, five feet in length, by two and a half feet wide. Fix a back and sides to it a foot high, only round down the two side boards to a level with the bed in front. Prepare a broad flat axle of hard seasoned wood, about eight feet between the shoulders, arrange a pair of light wagon shafts so as to attach them to one end of the axle, screw the bed or box securely to the right hand of the shafts and close to the shoulder of that end of the axle. Mount the machine on a pair of light wheels, two feet in diameter, so that the bed shall run about a foot from the ground. I built my wheels of seasoned three-inch oak plank, with a false hub four inches thick pinned on the outside.

Next dress out hickory slats, or fingers three-quarters of an inch thick and two inches in width, three and a half feet long. One foot of the length of these slats are to be diminished regularly to a narrow, rounded point like a cradle finger, and then the slats are to be screwed down on the bed, touching each other, and the points projecting forward. Take pieces of old worn out or crippled grass seythes, or broken hand saws, get a blacksmith to cut them into strips six inches long, the shape of the diminished slats, only a quarter of an inch wider; punch two holes through them, grind both edges to a smooth blunt edge, and screw the plates to the top of the fingers, so that their edges shall come in contact about three inches in front of that of the bed underneath.

On the axle, over the shafts, fix a separate platform and driver's seat, and a little pulley or chain and ratchet arrangement, so that the fingers in front can be raised or lowered to correspond with the height of the clover. Then a light chain from the right hand end of the axle drawn tight, and hooked into a steeple in the fore end of the right hand shaft will always equalize the draught and keep that part of the machine up square with the work.

Have an opening to close with a slide, in the back side of the box, with hooks on the outside to distend the mouth of a sack, and when you have three or four bushels of clover heads in the machine, hold up, hook on a sack, fill it, drop it behind, and go ahead again at a brisk walk of the horse, going round the clover field precisely as you would do with a reaper or mower. The steel blades will snick off the clover heads beautifully, and the clover seed harvest will be expeditiously accomplished.

I think my machine cost about \$3 50 for material and \$7.00 for labor. The expense would of course be something greater in these taxation times; but then the price of clover seed is about four times what it was in those days.

COSMO.

REMARKS—We thank "Cosmo" for his interesting letter, and shall be pleased to hear from him frequently.

The Monitor potato is new to us. What are its peculiarities and merits? In this section the trouble is not to get "hog corn," but to get the hogs to eat it. Soft corn is abundant with us this year, but we question if it is a desirable food for hogs. Better feed it to fattening cattle, and give the hogs sound corn. You must have had a very favorable season for corn, or else the farmers of Philadelphia and Delaware cultivate their land more thoroughly than their brethren in this section. There are few better tests of good agriculture than the scarcity of hog corn or nubbins. Grass, weeds, green stalks and nubbins are common enough in our corn fields.

The grass or weed you send is *Eleusine indica*. It is a native of the Southern States, where, according to FLINT, it "grows with great luxuriance and serves for hay grazing, and turning under as a fertilizer." It yields a good crop, he says, when many of the more northern grasses would fail. In this section it is not common, and is regarded as a weed. Last year one of our enterprising seedsmen received it from China, sent here as a new ornamental grass!

FATE OF THE BIG CANADA CHEESE.—We learn from the Napanee, C. W., *Standard*, that the big Canada cheese, recently exhibited at the New York State Fair, has met with a railroad accident, and been broken up. The following is the *Standard's* statement of the matter:

"The mammoth cheese exhibited at the recent Provincial Fair at London, weighing 4,000 pounds, has met with a terrible disaster, and been irreparably damaged. The owners designing to exhibit in Montreal, risked the invaluable possession upon the Grand Trunk Railway—what else could have been expected? The cheese was in a wagon which occupied a position on one of the platform cars, and when a short distance east of Napanee, this car, with several others, ran off the track and the mammoth cheese was turned over, and rolled with tremendous force down an embankment. The catastrophe had the effect of cracking it through and knocking out a few hundred pound chunks; and it is further reported that skippers, the size of woodchucks, startled by the shock, were seen to emerge from the spongy mass and make their way over the adjacent fields, but this story is possibly an exaggeration."

PRESERVING ICE.—Dr. Schwartz has communicated the following simple method of preserving small quantities of ice, which he has practiced with success:

"Put the ice in a deep dish or jug, cover it with a plate, and place the vessel on a pillow stuffed with feathers, and cover the top with another pillow carefully—by this means excluding the external air. Feathers are well known bad conductors of heat, and in consequence the ice is preserved from melting."

Dr. Schwartz states that he has thus preserved six pounds of ice for eight days. The plan is simple, and within the reach of every household.

WHEN a fish is wounded, other fish fall upon and devour him. There's some human nature in fishes.

ABSENCE cools moderate passions, and inflames violent ones.





## GARDEN WORK FOR NOVEMBER.

THE gardener can find plenty to do this month in securing those crops that are left out to the latest possible moment, and in putting the garden in the best condition for winter.

It is generally considered that a *heavy* soil may be benefitted by being thrown into ridges, either with the spade or plow, in the fall. A greater surface is thus exposed to the salutary action of the frosts of winter, and the sun and air of early spring. As one of the good results, it may be worked earlier in the spring.

*Asparagus*.—If not done earlier, the asparagus should be cut close to the ground, raked off, and the bed covered with fine manure.

*Beets*.—In gathering roots of any kind, it is a good plan to select some of the finest specimens and lay aside to raise seed from the next year. In this way, and by thorough culture, the farmer can be continually improving his vegetables. Beets, when put away for the winter, will be preserved in better condition if mixed with dry dirt.

*Carrots*.—Should be dug before the crowns are frozen, and kept the same as beets.

*Cabbage*.—To keep, should be pulled up by the roots. They can be hung up by their heels in the cellar, or stood away on their roots in the cellar with a little dirt scattered over them, or they can be stored in outdoor cellars. Those intended to be kept over for spring use, are preserved in the freshest condition, if buried head down in a trench.

*Celery*.—Earth up until there is danger of hard freezing, when it should be removed to a box in the cellar, and mixed with dirt, or into an out-door cellar, or it can be stowed compactly in a trench, 15 to 18 inches deep, and the tops nearly covered with dirt, some litter being thrown over them to prevent the ground freezing too hard to be removed with a pick.

*Onions*.—Should receive a light covering.

*Rhubarb*.—Large roots can be subdivided, re-set, and covered with fine manure.

*Spinach*.—Requires covering for winter protection.

## SMALL FRUITS.

Now is the *best* time to manure small fruits. Grapes, raspberries, strawberries and blackberries will yield a larger crop next year, if treated to a liberal dressing of *fine* manure, now. It will also protect them from the bad effects of severe cold and sudden changes.

*Grapes*.—Will do better if cut down from the trellis and slightly covered with dirt.

P. C. R.

## THE FIRE BLIGHT IN ENGLAND.

WE had supposed that the "fire blight," which is so destructive to pear trees in this country, was unknown in England. But it would seem from an article in the *Gardener's Chronicle*, for September 30, that aprieot trees are affected with a disease, which, if not precisely the same as our pear blight, is very similar to it. The article is signed "T. R.," and we presume is from the pen of Thomas Rivers, of Sawbridgeworth, well known as the originator of the modern system of "orchard home" culture, and a gentleman of great experience and extensive observation. We quote the article entire:

"I have been interested in reading an account of the aprieot culture in the Royal Gardens, Frogmore, and am reminded of the numerous theories formerly advanced to account for that most distressing and disastrous blight by which perhaps one-third or one-half of a fine tree full of fruit would in one day become totally dead. This was, I think, accounted for by some theorists by snow lodging on the large horizontal branches trained against a wall; this, thawing by day and becoming ice at night, it was thought, laid the foundation of this terrible disease. Others imputed it to the sun in summer scorching the bare parts of the old branches, and thus bringing on sudden death. I have strong reason for thinking it to be, like our potato and other vegetable diseases, a mystery; and although to be modified, yet perfectly incurable.

"I say this, because I have had some considerable experience in aprieot culture, and I have seen the trees under many different circumstances. In the south, west, and south-west of France, the standard trees, which are sometimes planted among the vines, and in orchards appropriated to them by thousands and hundreds of thousands, are often afflicted with the dying off of large limbs, without any apparent cause, and generally in the middle of summer. I remember when I saw this that my pet theory was knocked over, for I had thought and said that the disease was owing to our trees being budded on plum stocks, which brought on a plethoric growth, subjecting the tree to a sort of apoplexy or paralysis. My favorite remedy was therefore the budding aprieots on aprieot stocks. This, by bringing on the growth of more slender shoots, seemed likely to put off the evil day of blight, and I still believe it does so to a certain extent. My ideas have, however, received this season a new turn, for among my numerous seedlings are many raised from the 'Aprieot Pêche'—the peach aprieot; one of these, a fine young tree, four or five years old, one morning in July last showed signs of paralysis by its leaves withering; by the afternoon, owing to the hot sun, it was dead and sear to an extent of three-fourths of the tree. There was no mark in the stem, and no signs of canker, for it looked perfectly smooth and healthy, yet without the least warning it had died suddenly to within a foot of the ground, leaving only one branch, which has since the attack made a vigorous growth; on bending the stem it broke suddenly, and showed itself to be dry and decayed. The tree had not been



subjected to frost and snow, or to any extra exposure to the sun, for it had been in the orchard house summer and winter, standing among others, and of course partially shaded. It must be therefore considered a mysterious malady to which apricot trees, particularly of the Moor Park and Peach varieties, are more liable than some other varieties—still it is not confined to them, for I have just discovered a large bearing tree in a pot of another kind, that has within the last fortnight suddenly died; this was ten years old, and has lived constantly in the orchard house.”

The effects of the fire blight on pear trees are precisely the same as those described above, and it is quite probable that the cause is the same in both cases. The fact that some of the trees which had been always kept under a glass in the orchard house were blighted, proves that the theory formerly held in this country, that the blight was caused by rapid growth and immature wood followed by cold winters is not the true explanation. The subject is one of great practical importance in this country and we should be glad if “M. J. B.” of the *Gardener's Chronicle*, would investigate this apricot blight and give his views as to its cause. In this country the worst cases of pear blight we have witnessed have been in orchards planted on land previously occupied with nursery trees, and where the roots remaining in the land were covered with fungus. In one orchard of some seven hundred trees, standard and dwarf, and which for seven or eight years were very healthy. The blight broke out four years ago, and has killed three or four hundred of the trees just as they were beginning to bear good crops. This was an old nursery ground. Two other large pear orchards on similar land were almost completely destroyed. Another pear orchard planted on land where peach trees had been grown was also affected to the same extent. In all these cases old roots were found in the soil covered with fungus. We should state that the roots of blight trees seldom show any indication of the disease, and the stem, as in the case of Mr. Rivers' apricot, is frequently smooth and healthy, while the branches are withered and blackened by the blight.

#### PROTECTING TENDER ROSES IN WINTER.

TO THOSE who have not greenhouses in which the monthly tea and other varieties of tender roses can be kept during the winter, it is a matter of no little trouble to obtain a good collection of roses for out-door blooming during the summer months. Nearly all the best varieties, even those which are quite hardy in England, need protection in this country. There are two reasons for this; one is, that the wood and buds seem to mature more perfectly in England—and the other, that our winters are more severe. From the fact that the winter of 1860–61, in England, was as cold as it usually is in many parts of the Middle States, and that, nevertheless, many of these beautiful roses and other plants which are “tender” with us stood this severe cold without protection, it would seem that it is want of perfect maturity in the wood and buds, rather than the cold of winter that is the main reason why these plants are not hardy here.

This being the case, the object of the American horticulturist should be to induce a rapid and healthy growth the first part of the season, and resort to all the known means of inducing early maturity. Among them may be mentioned.

1. *A soil thoroughly underdrained to the depth of at least three feet.*—Stagnant water at any season of the year will inevitably produce an immature growth of wood. Many people think if their gardens are on a side hill, or on elevated ground, that there can be no necessity for underdraining. But this is a great mistake. If the owners of such gardens would dig an underdrain, three feet deep, from the bottom to the very top of the side hill, they would in nine cases out of ten, find that early in the spring the drain would discharge water—water, which if not removed by the underdrain, would have to be evaporated, and thus absorb much of the heat of the sun which would otherwise warm the soil to a considerable depth, and this at a season of the year when a warm soil is of the very first importance. We are satisfied that this almost universal lack of underdrainage is the main cause of all our difficulties.

2. *A Situation protected from winds.*—The foliage of tender plants is chafed and injured by our severe winds in spring, and, as is well known, anything which injures the leaves seriously, retards the growth of the plant. At night and on cold days the pores of the leaves are closed and evaporation is retarded. If the soil is warm the sap in the plants, derived from the soil, will be warm also; and when the pores are closed this warm sap will be retained, even when the atmosphere surrounding the plants is several degrees colder than the sap in the plants. The experiments of the late Mr. Knight demonstrated this fact. Within a few years this idea has been acted upon in the construction of an apparatus for heating the soil artificially, when it was found that tender plants, such as geraniums, fuschias, &c., growing on this artificially warmed soil, without glass or other protection would stand several degrees of frost without injury. The pores of the leaves closed and thus prevented the evaporation of the warm sap. Now, it is well known that wind increases evaporation, and this is doubtless one reason why they are so injurious to plants early in the spring.

3. *A rich, but not rank soil.*—We believe roses prefer rather a heavy than a light soil, but as Pat. said to the author of “My Farm of Edgewood,” when told that a certain kind of seed must be planted in a loamy soil, “And shure, isn't it in the garden thin, ye'd be after planting the seed?” We have to use the soil we happen to have, no matter whether it is the very best for the purpose or not. Fortunately plants are not so particular in this respect as most writers would have us believe. Only let the land be well pulverized by the spade to a good depth and judiciously enriched and we may expect good results from almost any ordinary soil. Let some well rotted barnyard manure be thoroughly incorporated with the soil to the depth of fifteen, eighteen or twenty inches deep, as the character of the subsoil will allow, and then mix some fine bone dust, or better still, some good superphosphate in



the soil in immediate contact with the roots when the plants are set out. The latter greatly stimulates the growth of the roots and favors early maturity. A turnip to which superphosphate is applied will mature a month or six weeks earlier than one having a dressing of rich nitrogenous manure, even when both are sown at the same time and in the same soil. The gardener who deprives himself of the use of superphosphate does not live up to his privileges. In our short season, when rapid and early growth is so desirable, it is invaluable.

4. *Not a weed must be suffered to grow on the land.*—Weeds not only rob the soil of "plant food" and moisture, but they abstract heat. We may be able to spare the former, but the latter must on no account be suffered to escape. Let the surface be kept loose and clean by the constant use of the hoe, but be careful not to go deep enough to disturb the roots. An inch or so of loose soil on the surface, while admitting the rays of the sun, acts as a mulch and retards evaporation and the escape of heat. Charcoal dust might probably be scattered on the surface with advantage.

5. *Pruning and summer pinching.*—Pruning, by lessening the proportion of branches to roots induces a vigorous growth and the same is true in regard to pinching off the young shoots in summer—and, within certain limits, a vigorous and healthy growth is favorable to early maturity.

6. *The plant must be kept free from insects.*—In the case of the rose, aphides and the rose bugs suck out the juices of the plant and seriously injure its growth. They must be destroyed by syringing the bushes with a solution of whale oil soap, tobacco, &c. If this is neglected, all other means for inducing a healthy growth and perfect ripening of the wood and buds will prove abortive. Those who have never syringed their rose bushes with whale oil soap will be equally surprised at the effect. It gives the leaves a glossy appearance and imparts health and vigor to the whole bush.

We can not but think that if our rose growers would adopt some such methods as the above the wood would be so well ripened that a covering of leaves would afford a sufficient protection for the choicest monthly tea roses which are now seldom seen except in gardens where there is a greenhouse for keeping the plants through the winter.

A gentleman near this city is very successful in wintering over his tender roses in the following simple manner: Put some boards round the beds, say a foot wide. Peg down the branches of the roses to the ground. Then cover the bed inside the boards with leaves a foot or fifteen inches deep and throw some branches of evergreens on top to keep them down. The object of the boards is simply to prevent the wind from blowing away the leaves. In this way he succeeds in wintering the choicest varieties of roses. In the spring on the removal of the leaves the buds come out to the tip of the branches, and he has a better display of roses than those who keep them in pots in the greenhouse.

We should add that his rose buds are well protected by an arbor vitæ hedge, and there can be little doubt

that this has much to do with his success—not from its protecting the beds in winter, but from breaking the severe winds in spring. In connection with the above we copy from the London *Gardener's Chronicle* an account of a beautiful climbing rose—a climbing variety of the *Devoniensis*, from a correspondent residing at Bath. He says:

"It may be interesting to know that this most beautiful of all light-colored climbing roses, so successfully and universally cultivated in this neighborhood, is of the most vigorous and robust growth, making shoots from established plants, measuring from eighteen to twenty feet in length in one season. It is a most abundant early and late bloomer; in favorable situations it commences to flower in May, and continues to produce its most beautiful blossoms all through the season, until late in November, and it retains its foliage all the year. It is very hardy, having withstood the severe winter of 1860-61. In this locality it grows and thrives in almost any soil or situation, even in thickly built parts of the city, amidst the smoke and dust of which it thrives and blooms in great perfection. So highly esteemed is this variety, that there is scarcely a villa residence in this neighborhood where one does not find this rose, and no amateur considers his collection complete without it. Its blooms are of large size, some of them measuring six inches in diameter, and their shape is most perfect. It is in fact one of the best light-colored exhibition roses in cultivation."

The *Devoniensis* is not hardy here under ordinary treatment, but may be kept over the winter in the manner we have described. This climbing variety would be a great acquisition, if it could be kept over the winter in the same way. If trained to a trellis in such a way that the trellis and rose could be laid on the ground during the winter and covered with leaves, we do not see why it can not be grown.

TO PREVENT RABBITS FROM GIRDLING TREES.—At the recent discussions of the Indiana Horticultural Society it was stated that the best way to prevent rabbits from gnawing trees was to smear the bark with blood. If the trees are rubbed with a piece of fresh liver the rabbits will not touch the bark as long as the least taint of blood remained, even after being thoroughly washed by rains.

FLOWERS IN THE WINDOW.—There is nothing more attractive to the eye of the outsider than the plants and flowers in the windows of houses during the season when garden culture is out of the question. Here every one, without regard to circumstances, may have a miniature greenhouse with all its luxuries and few of its inconveniences. The expense is not worth mentioning, and the labor is a pleasure to all who love these most loveable beauties of nature. In many of the public schools of New-England, the female teachers and larger scholars cultivate many flowers throughout the year, either in doors or out. So in numerous factories, it has become a usual sight to see at all times the hanging flower or fern vase, the pots on the window sill carefully tended and universally prized during the hours of labor.



### BLIGHT ON THE CURRANT BUSHES.

"A destructive blight upon the currant bushes appeared last summer in many localities of New England. The number of currants formed was unusually few, and before they were ripened the bushes had the appearance of having been burned, so completely were the leaves blackened and destroyed.

"If you can suggest any remedy to avert this destruction for another season, you will greatly oblige many of the readers of the *Genesee Farmer*."—W. W., *West Winsted, Ct.*, Oct. 28, 1865.

This is something new to us. We have seen nothing of the kind in this section. We understand that the year before, you had an unusually large crop—a larger crop than ever before known; so large, in fact, as to lead to the remark that it was sent by Providence for the soldiers. Now, it is probable that as your bushes have hitherto been free from disease and have not been attacked by worms, they have been allowed to grow without pruning and have become too large. And as you had such a heavy crop in 1864, it is quite probable that the bushes bore more than they were able to stand, and were exhausted. If the smallness of the crop and the withering of the leaves were the result of exhaustion, it is probable that next season the bushes will bear a good crop.

The only remedy we can suggest is to prune the bushes, taking out as much of the old wood as can be spared, and cutting back the young shoots at least one-half. This can be done any time this winter or early spring. Then next season remove every sucker that starts from the roots, and all that can be spared from the branches. In this way you will throw all the sap into the bearing wood and will probably have a good crop and certainly larger currants.

### WINTER DRESSING OF ASPARAGUS BEDS.

ABOUT the beginning of November, if the stalks of Asparagus turn yellow, which is a sign of their having finished their growth for the season, cut them down close to the earth, carry them off the ground, and clear the beds carefully from weeds.

Asparagus beds must have an annual dressing of good manure; let it be laid equally over the beds, two or three inches thick, after which, with a fork made for the purpose, (which should have three flat tines,) dig in the dung quite down to the crowns of the plants, by which means the roots will be greatly benefitted; as the winter rains will wash the manure down among them. It is the practice with some gardeners to dig the alleys at every autumn dressing, and cover the beds with the soil taken out; this may be done for the first two years after the beds are made, but not afterwards; as, when the plants are in full growth, their roots and crowns extend into the alleys, and digging them up frequently destroys plants, or renders them too weak to produce buds in perfection. The beds will be greatly benefitted if covered to the depth of several inches with leaves, sea-weed, or long litter from the horse stables.

The seeding Asparagus should also have a slight

dressing, that is, clear the bed from weeds, and then spread light dung over it, to the depth of one or two inches, to defend the crown of the plants from frost.

### CULTURE OF BULBOUS ROOTS IN THE PARLOR.

"THE culture of bulbous roots in a green-house, or light room, during the winter, is comparatively easy, provided two points be attended to; the first is to keep them near the light, and turn the pots or glasses round frequently, to prevent their growing crowded; and the second is, when the plants have done growing, to give them little or no water; for want of attention to these points, bulbs have been known to produce foliage year after year, without showing any sign of blossoms."

"Hyacinths and other bulbs intended for glasses should be placed in them about the middle of November, the glasses being previously filled with pure water, so that the bottom of the bulb may just touch the water; then place them for the first ten days in a dark room, to promote the shooting of the roots; after which expose them to the light and sun as much as possible; they will blossom without the aid of the sun, but the colors of the flowers will be inferior. The water should be changed as often as it becomes impure, draw the roots entirely out of the glasses, rinse the fibres in clean water, and also the glasses inside, care should be taken not to suffer the water to freeze, as it not only bursts the glasses, but often causes the fibres to decay. Whether the water be hard or soft, is of no great consequence; but soft, or rain water, is generally preferred, and it must be perfectly clear."

SPANISH CHESTNUTS, ETC.—Mr. Henry Smith, of New York, sends us some Spanish chestnuts, of large size and very nice. His trees are very full, and we really do not understand why this fruit is not more extensively raised. Mr. S., in speaking of his pears, says: "My pears this year have not done as well as usual, except the Bartlett, which was very fine. My Beurre Diels were a failure and cracked very much. Duchess d'Angouleme good. Some dwarf apples on Paradise stocks which I got from H. E. Hooker & Co., could not be excelled. I have just received their catalogue—very full, but not a single nut tree enumerated, overlooking, like most nurserymen, a most important feature of a well regulated country place. I could wish I were a young man that I might set out new grounds, but at 60, it is too late."

THE CUT WORM.—Dr. Fitch, Entomologist to the New York State Agricultural Society, recommends plowing or digging *late in the autumn* for killing cut worms. The worms burrow beneath the soil at this season, and lie dormant till spring.

"They can be killed by *thawing* and freezing them. Gradual thawing in the earth does not hurt them; but if they are exposed so that the sun thaws them rapidly they are destroyed. With this object *late* plowing in the fall is beneficial. Early plowing in the spring, if we have freezing and thawing weather afterwards, would be useful."



## WINTERING CABBAGES, &amp;c.

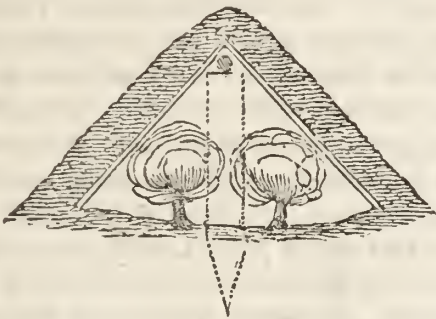
THERE is an unusually good crop of cabbages the present season, and it is important to know how to keep them through the winter. Perhaps, on the whole, there is no better way than that practised by the Dutch—to dig a trench large enough to hold the heads and place the cabbages with all the leaves on in the trench, with the roots uppermost, and cover the heads with soil. The place selected must be dry, and as a general rule the cabbage will keep sweet and fresh all winter.

Last year a friend of ours pulled up some Savoy cabbages and accidentally left them lying on the ground all winter. In the spring he was surprised to find that the snow had protected them perfectly, and they were as fresh as could be desired, and he sold them to the grocers for two dollars a dozen.

John J. Thomas of the *Country Gentleman* says he has adopted for several years, the following method of keeping cabbages that have not headed properly:

"He takes the cabbages and sets them as closely as they will stand in a double row, in their natural position, in a wide and shallow trench. He then forms an earth roof over them in this way:

"Set in a piece of upright plank at each end to support the ridge pole (shown by the dotted lines in the figure.) Place a rail or stiff pole on these for the ridge pole, and on this the ends of the short pieces of board in the form of a roof. Cover these boards with about six inches of earth, or enough to keep the soil from freezing in which the cabbages stand. This is the whole operation. Nearly all of these will be handsomely



headed in the spring, and being entirely excluded from the light, they will be more delicate both in appearance and flavor, than common cabbage heads." Two hours labor last autumn, he says, gave him a fine supply of cabbages for a moderate family nearly through the whole spring.

"Failure has sometimes resulted by not covering the roof with sufficient earth to keep out severe cold. About six inches does well for the Northern States. A sheltered place is best. A small hole should be left at each end for ventilation. In very cold weather these holes might be stopped up."

NO TIME is so favorable for the purchase and transportation of fruit trees and shrubs, as the autumn.

PHYSIOLOGISTS teach, and observing agriculturalists well know, that the "roots of trees extend but little farther than their branches."

## THE ROSE "BLIGHT."

WE often hear the remark: "We formerly grew beautiful roses, but have been obliged to give them up on account of the blight."

Now this so-called "Blight" is nothing more nor less than the effect of the rose bug. Keep your bushes free from aphides and rose bugs, and you will not be troubled with blight.

We hope those of our readers who have become discouraged on account of these pests will make one more attempt to grow this "Queen of Flowers." It is not yet too late to set out a few hybrid perpetuals, moss, and other roses this fall. Two years ago we set out some the first week in December, and covered the bed with leaves and manure. They all lived and did well. Then by syringing the bushes with whale oil soap, and tobacco water, you will not be troubled with insects or "blight."

NEW WATERMELON.—At the recent Chester county Agricultural Exhibition, held at West Chester, one of the judges on fruits advised us of a superior watermelon, brought to the attention of the committee, exhibited and grown by Bayard Taylor, on his farm in Chester county. It has the remarkable property of keeping through the winter and preserving its delicious flavor unimpaired. It promises to be a great acquisition in this line.

Bayard Taylor informs us he obtained the seed himself on the Volga, in the interior of Russia, from a melon grown on the Persian shore of the Caspian Sea, not being aware at the time that it possessed the property of long keeping after being gathered, although he knew that there were such melons in Russia. It seems to retain this property here, as the melons raised this season have now been six weeks off the vines, fully ripe, and promise to keep for three months yet.—*Morris Rural Adv.*

BLACK-CAP RASPBERRIES.—Phineas Allyn, writes from St. Joseph, Mich., to the New York Farmer's Club, that one neighbor, "from 1,300 hills of this raspberry, has marketed 45 bushels, their first crop. Another, Mr. A. C. Fish, formerly of Rochester, N. Y., marketed 500 bushels from 8,000 plants. His net profits were over \$7.00 per bushel, and himself a cripple that could do no work. Their time of ripening in 1864 began on the 13th of June, and continued a little more than three weeks. This year, they began to ripen for market, July 2, and continued from three to four weeks, on different fruit farms."

CAULIFLOWERS that have not fully headed, if hung up with the leaves down in a cellar, will, it is said, form good heads in a few weeks and furnish a supply at a time when our tables are scantily supplied with good vegetables. We have not tried this plan, but have succeeded in keeping cauliflowers for a month or more by covering the roots with soil in the cellar, letting the cauliflowers stand as they did when growing. Those only partially headed are the best for this purpose.



## Young People's Page.

### ABOUT TOBACCO.

"Here, Carlo, will you take a smoke?"  
 Asked little Tommy Carr,  
 As in Sir Doggy's mouth he put  
 The end of a cigar.

"Bow wow," cried Carlo, "master dear,  
 You surely mean a joke;  
 I never knew a dog so lost  
 To shame, that he would smoke."

"Then I will give it to the pig."  
 Said Little Tommy Carr,  
 And at the sty he offered her  
 The end of the cigar.

The dignity of Mrs. Pig  
 Was sorely wounded now;  
 "Ugh, ugh! my little man," she cried,  
 "No dog, nor pig, nor cow,

"However hungry they may be,  
 The dirty weed will touch;  
 How folks with reason smoke or chew,  
 I wonder very much!"

"I'll run and wash my hands," cried Tom,  
 And never, never more,  
 Touch a cigar, though uncle drop  
 A dozen on the floor.

If from tobacco, senseless brutes  
 Away disgusted turn,  
 That 't is not fit for *human* mouth  
 We can not fail to learn.

—Songs for my Children.

### TALK WITH THE YOUNG FOLKS.

WRITTEN FOR THE GENESEE FARMER BY C. N. BEMENT.

#### GIRLS AT HOME.

THERE are two kinds of girls; one is the kind that appears best abroad, the girls that are good for parties, rides, visits, balls, etc., and whose chief delight is in such things; the other is the kind that appears best at home, the girls that are useful and cheerful in the dining-room, the sick-room, and all the precincts of home. They differ widely in character. One is often a torment at home; the other is a blessing. One is a moth, consuming everything about her, the other is a sunbeam inspiring life and gladness all along her pathway.

Now it does not necessarily follow that there shall be two such classes of girls. The right education will modify both a little, and unite their characters in one. Girls are not made altogether for home, any more than boys are. Society would be of little worth without girls, without women. The first pleasure and duty of every woman should be at home; the next should relate to the refinement and well-being of society. But in order that she may benefit and adorn society, she must first know how to benefit and adorn home. Hence all girls, rich and poor alike, should be early and well instructed in all the duties and cares of home. From the cellar to the garret, she should know all that is to be done. From the kitchen to the parlor she should be complete mistress. All the interests of home should be as familiar to her as household words. Neither idleness, folly nor indifference should prevent her from engaging heartily in all the concerns of home life. This

will be to her a school more valuable than the seminary or the ladies college.

It behooves mothers therefore that they are teachers of the first dignity in position. Their daughters will be much what they make them. The home education will lay the true foundation of character. It will fix the true principles of life in the young girl's mind. It will give her an insight into domestic duties and teach her that to be useful is one great end of life. Book education can easily follow a good home training; but a good home training is not apt to follow the education of schools. Girls well taught at home are the girls that appear well every where. Give us the well read girls and we shall have no need of any other. They will make the true woman.

#### A WORD TO FATHERS.

We have read a story of a little boy who when he wanted a new suit of clothes, begged his mother to ask his father if he might have it. The mother suggested that he might ask for himself. "I would," said the boy, "but I don't feel well enough acquainted with him." There is a sharp reproof to that father in the reply of his son. Many a father keeps his children at such a distance from him, that they never feel confidentially acquainted with him. They feel that he is a sort of monarch in the family. They feel no familiarity with him. They fear him and respect him, and even love him some, for children can not help loving him some, everybody about them, but they seldom get near enough to him to feel intimate with him. They seldom go to him with their little wants and trials. They approach him through the mother. They tell her everything. They have a perfect highway to her heart on which they go in and out with perfect freedom. In this keeping-off plan fathers are too blame. Children should not be held off. Let them come near. Let them be as intimate with the father as mother. Let their little hearts be freely opened. It is wicked to freeze up the love-fountains of little ones' hearts. Fathers do them an injury by living with them as strangers. This drives many a child away from home for the sympathy his heart craves, and often into improper society. It nurses discontents and distrusts which many a child does not out-grow in his lifetime. Open your hearts and your arms, oh fathers; play with them; be fathers to them truly, and they will not need a mediator between themselves and you.

#### GOOD NATURE.

There is nothing pleasanter in children, than good nature. It makes them agreeable, cheerful and happy. It preserves them from many a trouble, keeps them from many evils and makes them in many ways useful. It is better to laugh than cry; better to be merry than sad. Fretting, whining, crying children often greatly annoy every body about them. Cross children generally make cross people. Crying children make fault-finders when grown up. Children and young people should take special pains to be good natured, to be cheerful, pleasant, kind; keep the heart glad and the face wreathed in smiles, so shall all dark and evil thoughts be kept away.

Poughkeepsie, July, 1865.



## Ladies' Department.

### FALL AND WINTER FASHIONS.

THE great change which fashion has made in ladies' dress is in bonnets. The waterfall bonnet, absurd, but very convenient, has given out—and the bonnet of the "Empire" has taken its place. There seems to be so many varieties of this new style that it is difficult to class them together. The newest is a large round crown, with a narrow front and a stiff straight cape setting quite high on the head and either worn without a waterfall, or with a very small one. The puffed crowns are much prettier and more dressy than the round ones, and are frequently made so that a waterfall of considerable size can be worn with them. Black shirred silk bonnets, bound and trimmed with velvet, are still the general style. Less lace is worn than formerly, probably on account of the greatly increased expense. Long veils, or *crepe lisse*, take somewhat from the stiffness and inelegance of the new style of bonnet.

Godey's fashion letter for November says :

"Round hats are considered indispensable for young ladies, and some quite novel shapes are among the late importations.

"A *tricorne*, or three-cornered hat, is called the *Garde Francaise* under Louis XV. It is made of velvet and trimmed with feathers. Another, termed *Gamin de Paris*, is of either velvet or felt, with round crown, and trimmed with a colored *lisse* veil, which hangs behind in two wide ends, one of which is brought across the face as a veil. Besides these, are the most coquettish little *toquets* of bright-colored velvets trimmed with grebe and other fanciful plumes.

"Head dresses are all in the Greek style, either fillets of velvet studded with beads, or stars of gilt, silver, or steel, or else they are hung with chains of gilt sequins. For full dress, these *bandelettes* or fillets are composed of delicate flowers mounted on gilt stems, with green leaves edged and veined with gold. The artistic blending of gold with the beautiful flowers and foliage renders these coiffures perfectly charming."

In dresses the most popular material in dress goods for winter wear, are—

"The most popular materials for winter wear are eping-lines, Highland cloths, serges, alpacas, poplins, reps, merinos, and linseys or winseys. The latter, though worn for some time both in Paris and London, were first introduced here last year; but in such small quantities as to be seen but by few. This year, however, they have been imported to a considerable extent, and bid fair to be the fashionable material for walking and *demi-toilette*, suits. Some are of cotton and wool, others of cotton and silk; the latter are the softest, and make the most stylish dress. They are mostly self-colored of the different shades of gray, brown and purple. Some are striped, others mottled. The latter are of a mixed ground, with uneven-looking knots of bright colors dotted over them. The preference, however, is decidedly given to the plain linseys."

"The newest neckties are of silk, with birds of gay plumage on the ends, which are heavily fringed; others are ornamented with flowers, or a helmet with shield. Fancy white ties are very much worn, and the most novel we have seen were ornamented by means of Decalcomanie. As the art of Decalcomanie may not be familiar to all our readers, we will give them an idea of what it is. Beautifully colored pictures, prepared for the purpose, are carefully cut out, covered with a certain kind of varnish, and laid on the object to be decorated, which may be silk, muslin, glass, China, ivory, or wood. A damp sponge is then applied to the wrong side of the picture, which is uppermost, and the paper is removed, leaving on the object to be decorated the impression of the picture in all its beautiful and delicate colors. We give the idea, as very many beautiful things may be ornamented that would be very suitable for Christmas presents. We have seen vases, card receivers, saucers, &c., on which the paintings were so beautiful that they had all the appearance of Sevres China."

In cloaks the close fitting basquine of silk, lined and wadded, or cloth, is still the prevailing style. Circulars are worn rather more than last year, and both sacque and circle are quite elaborately trimmed with bands of silk, gimp, or lace.

### DOMESTIC RECEIPTS.

Contributed to the Genesee Farmer.

**FRENCH PICKLE.**—We give the following recipe, hoping that all housekeepers will use it, as it is the best pickle that we know of.

Slice one peck of green tomatoes and six large onions, and spread them on plates over night, with one teacup of salt sprinkled over them. In the morning drain off the liquid and boil twenty minutes in one quart of vinegar and two quarts of water, and then drain them through a sieve; take two quarts of vinegar, half a pound of white mustard, two pounds of brown sugar, two tablespoonfuls of ground cinnamon, two tablespoonfuls of cloves, two tablespoonfuls of allspice, two tablespoonfuls of ginger, two tablespoonfuls of mustard. Boil twenty minutes.

**JOHNNY CAKE.**—Three cups of meal, one cup of flour, two cups sweet milk, one-half cup molasses, one teaspoonful soda. This can be baked in two square tins or in a two quart basin for a loaf of bread. Bake two hours.

**HARD TIMES PUDDING.**—One-half pint molasses, one half-pint water, two teaspoonfuls of soda, tablespoonful of salt, thicken with flour to a tolerable thick batter, put it in a pudding-bag, leaving nearly one-half to swell, boil it steadily for three hours; to be served with cream or vinegar sauce.

**WAFERS.**—Two teacups white sugar, one of butter, one of cold water, one level teaspoonful soda, roll very thin and bake quick.

A handful of good life is better than a bushel of learning.



## Miscellaneous.

### HOME THEY BROUGHT HER WARRIOR DEAD.\*

Home they brought her warrior dead:  
She nor swooned nor uttered cry:  
All her maidens, watching, said,  
"She must weep or she will die."

Then they praised him, soft and low,  
Called him worthy to be loved,  
Truest friend and noblest foe;  
Yet she neither spoke nor moved.

Stole a maiden from her place,  
Lightly to the warrior stole,  
Then took the face-cloth from the face:  
Yet she neither moved nor wept.

Rose a nurse of ninety years,  
Set his child upon her knee,—  
Like summer tempest came her tears,—  
"Sweet, my child, I live for thee."

VERY LIKE!—An unsophisticated countryman the other day, coming to Washington with a load of wood, saw a military officer, followed at a respectful distance by two orderlies, in full gallop. "Good gracious!" said he, "haven't they caught him yet? I was in about three weeks ago, and they was a-runnin' after him then."

FAME.—Thackeray, when speaking about fame, would frequently tell the following anecdote:—When at dinner, in St. Louis, one day, he heard one waiter say to another. "Do you know who that is?" "No," was the answer. "That is the celebrated Mr. Thacker." "What's he done?" "Blessed if I know," was the reply.

A COLONEL of one of the regiments attached to the Army of the Potomac was recently complaining at an evening party that, from the ignorance and inattention of the officers, he was obliged to do the whole duty of the regiment. "Said he; 'I am my own major, my own captain, my own lieutenant, my own sergeant, and'—'Your own trumpeter,'" said a lady present.

A LIEUTENANT was promenading in full uniform one day, and approached a volunteer on sentry, who challenged him with "Halt! who comes there?" The Lieutenant, with contempt in every lineament of his face, expressed his ire with indignant "Ass!" The sentry's reply, apt and quick, came, "Advance, ass, and give the countersign."

THE following dialogue is said to have taken place recently between a married couple on their travels: "My dear, are you comfortable in that corner?" "Quite, thank you, my dear." "Sure there's plenty of room for your feet?" "Quite sure, love." "And no cold air from the window by your ear?" "Quite certain, darling." "Then, my dear, I'll change places with you."

A RICH petroleum worker, gaunt as a skeleton and ignorant as a hodman, went to an artist to have his portrait taken. "Will you have it taken in oil or water-colors?" inquired the artist. "He, of course," replied he, "It comes to me more natural; and, besides it makes me look fatter."

\*Songs for all Seasons. By ALFRED TENNYSON. Boston: Ticknor & Fields.

### WIDOW JONES' COW.

MR. WELD, editor of the New York *Despatch*, tells a story in as rich and quaint a style as any lord of the quill we know of. For example—

"Widower Smith's wagon stopped one morning before widow Jones' door and gave the usual signal that he wanted somebody in the house, by dropping the reins, and sitting double, with his elbows on his knees. Out tripped the widow, lively as a cricket, with a tremendous black ribbon on her snow-white cap. Good morning was soon said on both sides, and the widow waited for what was further to be said.

"Well, ma'am Jones; perhaps you don't want to sell one of your cows, no how, for nothin', no way, do you?"

"Well, there, Mister Smith, you couldn't have spoken my mind better.—A poor, lone woman like me, does not know what to do with so many creatures, and I should be glad to trade, if we can fix it."

So they adjourned to the meadow.—Farmer Smith looked at Roan—then at the widow, then at Brindle—then at the widow—at the Downing cow—then at the widow again—and so on through the whole forty. The same call was made every day for a week, but farmer Smith could not decide which cow he wanted. At length, on Saturday, when widow Jones was in a hurry to get through her baking for Sunday—and had ever so much to do in the house, as all farmer's wives and widows have on Saturday, she was a little impatient. Farmer Smith was as irresolute as ever.

"That Downing cow is a pretty fair creature—but—" he stopped to glance at the widow's face, and then walked around her—not the widow, but the cow—

"That ere short horn Durham is not a bad looking beast, but I don't know—" another look at the widow.

"The Downing cow I knew before the late Mr. Jones bought her." Here he sighed at the allusion to the late Mr. Jones. She sighed, and they both looked at each other. It was a highly interesting moment.

"Old Roan is a faithful old mileh, and so is Brindle—but I have known better." A long stare succeeded this speech—the pause was getting awkward, and at last Mrs. Jones broke out:

"Law! Mr. Smith, if I'm the cow you want, *do say so!*"

The intentions of the widower Smith and the widow Jones were duly published the next day as is the law and custom in Massachusetts, and as soon as they were "out-published" they were married.

LITTLE NANNIE is a close student of the Bible, but not very clear as to some points. "Ma," said she, one Sunday evening, after having sat like a good child all day in the house, "have I honored you to-day?" "I do not know, Nannie; why do you ask?" said he mother. "Because," said little Nan, shaking her curls sadly, "the Bible says, 'Honor thy father and thy mother that thy days may be long; and this has been oh, the longest day I ever saw.'"

DAUB yourself with honey, and you will have plenty of flies.





## THE GENESEE FARMER FOR 1866.

### REDUCTION OF CLUB RATES.

THE terms of the GENESEE FARMER for 1866, will be: Single copies, \$1.00 a year; *five* copies, \$4.00, or 80 cents each; *eight* copies, \$6.00, or 75 cents each; and any larger number at the same rate.

### PREMIUMS! PREMIUMS! PREMIUMS!

1. To every person sending us *five* subscribers, at 80 cents each, we will send a copy of the RURAL ANNUAL AND HORTICULTURAL DIRECTORY for 1866.

2. To every person sending us *eight* subscribers, at 75 cents each, we will send one extra copy of the FARMER, free for a year, and a copy of the RURAL ANNUAL for 1866.

3. To every person sending us *ten* subscribers, at 75 cents each, we will send prepaid, by mail, a package containing 100 copies of the Babbittonian Penmanship, which will be very valuable to any one learning to write, and sells for \$1.50. Or, if preferred, we will send a copy of Emerson & Flint's Manual of Agriculture, (a most valuable book,) or, a copy of The Horse and His Diseases; or, Everybody's Lawyer.

4. To every person sending us *twelve* subscribers, we will send any of the premiums offered above for *ten* subscribers, and in addition will send an extra copy of the FARMER and RURAL ANNUAL for 1866.

5. To every person sending us *fifteen* subscribers, we will send the same premiums offered for *twelve* subscribers, and a copy of Miner's Domestic Poultry Book.

6. To any person sending us *twenty* subscribers, at 75 cents each, we will send a complete set of the GENESEE FARMER for the years 1860, 1861, 1862, 1863, 1864, handsomely bound, with complete index.

7. To every person sending us *twenty-five* subscribers, we will send a set of the bound volumes of the GENESEE FARMER for 1860, 1861, 1862, 1863, 1864, and also a set of the bound volumes of the RURAL ANNUAL for 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863. (This is a most valuable premium.)

8. To every person sending us *thirty* subscribers, at 75 cents each, we will send one of Woodruff's Weather Indicators, price \$6.00.

9. To every person sending us *thirty-five* subscribers, at 75 cents each, we will send one of Woodruff's Barometers—price \$10.00.

10. To every person sending us *forty* subscribers, at 75 cents each, we will send one of Woodruff's Barometers, price \$15.00. Or, if preferred, one of Doty's Washing Machines, price \$15.00. Sent by express, free of charge, (a most useful machine, which should be in every farmer's family.)

11. To every person sending us *one hundred* subscribers, at 75 cents each, we will send one of Grover & Baker's best Family Sewing Machines, price \$55.00.

We are endeavoring to make arrangements by which, next month, we shall be able to enlarge the list. In the meantime will not every friend of the GENESEE FARMER make an earnest effort to double our circulation for 1866?

### A Good Club in a Few Hours.

THERE are many young farmers among our readers who could easily get up a good club for the *Genesee Farmer*, if they would only make the attempt—and not be discouraged if some crabbed old fogys refused to take it! Get a few of the best farmers to start the list, and it will then be an easy matter to get up a score or a hundred.

A young farmer at North Chili, a few days since, was at the depot, and happening to have a copy of the *Genesee Farmer* in his pocket, he asked them to look at it, and got five new subscribers in about as many minutes! He was surprised, he said, to find how many farmers there were who took no agricultural paper whatever. He continued his efforts for a little while and soon got up a nice club of eighteen, and will doubtless double it in a few days. How many others are there that will do likewise?

### The Genesee Farmer in Canada.

DESIROUS of extending the circulation of the *Genesee Farmer* in Canada, we shall *prepay* the American postage without extra charge. The price to Canadian subscribers, therefore, will be the same as in the States, when American money is sent.

For Canada money the price for the present will be: Single subscribers, 70 cents; five copies, \$3.00; and an extra copy of the *Farmer* free to the getter-up of the club; eight copies, \$4.00, with an extra copy of the *Farmer* and *Rural Annual* free. Larger clubs at the same rate, 50 cents each. *This it must be understood is in Canada money.* We hope our Canada friends will compete for the Premiums, and give us some good old-fashioned Canadian clubs.

### The Rural Annual for 1866.

THE number of the RURAL ANNUAL AND HORTICULTURAL DIRECTORY for 1866, is now in the hands of the printer, and will be issued in a few weeks. The price will be as hitherto, 25 cents. When taken in clubs with the *Farmer*, 20 cents; sent prepaid, by mail, to any address. We hope every reader of the *Genesee Farmer* will take the RURAL ANNUAL for 1866. It is a cheap and valuable work.

TO OUR SUBSCRIBERS.—We shall be glad to hear from any of our readers on any subject of interest to the agricultural community.



### Back Volumes of the Genesee Farmer.

JOSEPH KINNEY, Esq., of Adrian, Ohio, sent some time since for a set of the bound volumes of the *Farmer*, and unsolicited writes about them as follows:

"I like the set of bound volumes of the *Genesee Farmer* very much. They are just what I want. If anything new turns up on the farm among the stock or elsewhere, all I have to do is to turn to the ample index, and in one or the other volumes, ninety-nine times in a hundred I will find just what I want.

"A farmer should always take an agricultural paper to keep him posted on the current agricultural literature of the time present; but for accidents and incidents he should have the back volumes of a standard work, well indexed; and without disparagement to other agricultural and horticultural publications, I say that in my opinion the *Genesee Farmer*, for concise, plain, practical common-sense farm and garden information is a standard."

### The Cattle Plague in England.

THE cattle plague which has caused so much excitement in England, is still raging. It is a most fatal disease for which no cure has as yet been discovered. It has carried off thousands of cattle, and at the last accounts the disease had broke out among the sheep "in all its intensity and fatal virulence."

### The Markets.

THE stringency in the money market still continues, both in this country and in Great Britain and France. The Bank of England has raised its rate of interest to 7 per cent, and the letters which have passed between the American minister, Mr. Adams, and Earl Russell in regard to the claims for damages committed by the Alabama, has had a somewhat depressing effect on United States bonds, and checked the demand for them in England. Gold has advanced about 2 per cent, since last month. It is now quoted at 146. The speech of Secretary McCulloch, in which he expressed his desire to return to a specie basis, and his efforts in this direction by funding legal tenders, has had less effect on the gold market than was anticipated. The banks loan the government large sums at 5 and 6 per cent interest, which are payable on giving ten days notice. The amount of such call loans is over one hundred millions of dollars. Now, the experience of the past few weeks shows that any contraction of the currency makes a tight money market and increases the rate of interest, and the effect is to cause the banks to call in their short loans from the government, so that as long as the treasury owes the banks so much money payable on demand, or what is almost equivalent to it, on giving ten days notice, any attempt to fund legal tenders is rendered futile. Before we shall have any real contraction in the currency these call loans must be paid off.

There will be an effort made to prevent such contraction. There are those who think that the commerce and industrial interests of the country require more rather than less currency. The South alone will

require a large amount, and it is certainly true that the agriculture of the country, north and south, calls for far more capital than it can now obtain. But whether this desirable object would be attained by the issue of more greenbacks is somewhat doubtful. Hitherto they have stimulated *speculation* far more than they have increased the *productive* interest of the country. It is difficult to estimate the amount of money employed in this worse than useless manner. It is not confined to the cities; even farmers have caught the infection. They see their neighbors getting suddenly rich from some lucky speculation, and are tempted to take a chance. Of course, in nine cases out of ten they lose all they invest—and keep *quiet*; while the lucky ones who get rich (only on paper,) make no effort to conceal their suddenly acquired wealth. Hearing nothing of the failures and much of the successes, people become tired of the slow, old fashioned way of getting a living by honest labor.

From the amount of internal revenue derived from the sale of stocks and other business done by the brokers in New York, the astounding fact is revealed that *six thousand millions* of dollars of stocks, &c., have changed hands during the past year. The amount of money made by the brokers on these sales doubtless exceeds the total interest derived from all the railroad, bank, and other stocks in the United States. Of course, what they make somebody loses. Not a farthing is added to the wealth of the nation by these transactions.

The duty of farmers is plain. Stick to your business. Be frugal and industrious, and lend all your energies to the one grand object of increasing the productiveness of your farms. Good farming will pay as never before. The more others neglect it the better it will pay those who attend to it. Stick to the farm, even though it should appear that the profits will not pay the taxes. These things will right themselves. Speculators must eat. They cannot live on "greenbacks," but must pay them out for the products of the farm.

The last *Mark Lane Express* quotes American red wheat in London at 44s@47s per quarter, (\$1.32@\$1.41 per bushel,) and white at 47s@50s (\$1.41@\$1.50,) and spring wheat 43s@46s, (\$1.29@\$1.38 per bushel.) With gold at 146, \$1.50 in gold is equal to \$2.19 in our currency; and this is, therefore the highest price of American white wheat in London, and \$2.06 the highest price of red wheat. It is very evident, therefore, that at present prices wheat cannot be shipped to England. *Wheat is worth more in Rochester than it is in London!*

Four years ago at this time the highest price of American white wheat in London was \$1.89, and the highest price of red, \$1.74. While in this city the former was worth \$1.25, and the latter \$1.07.

Three years ago at this time, American white wheat in our currency was worth \$2.30 in London, and red \$2.20. In this city the former sold for \$1.30 and the latter for \$1.10.

In October last year, American red wheat was worth in our currency \$2.60 in London, and \$1.75 in this city. Now, as we have said, it is worth *more* in this city than it is in London.



This is a very important fact. It shows one of two things; either that we have raised no more sound wheat than is needed for home consumption; or that the present prices have no real basis and must decline. If the former is true—if for the first time in many years, the United States and Canada have not raised more wheat than is needed for home consumption, prices may be much higher than they now are.

The following table, which we compile from the markets in the *Genesee Farmer*, shows the price of some of our leading agricultural products in New York at this season, for the last seven years:

	—1859.—	—1860.—	—1861.—	—1862.—	—1863.—	—1864.—	—1865.—
White Wheat.....	\$1.35 @ \$1.45	\$1.50 @ \$1.60	\$1.35 @ \$1.58	\$1.45 @ \$1.65	— @ \$1.75	\$2.20 @ \$2.45	\$2.40 @ \$2.75
Red Wheat.....	1.10 @ 1.15	1.38 @ 1.42	1.28 @ 1.40	1.20 @ 1.45	— @ 1.40	1.90 @ 2.20	1.72 @ 2.35
Corn.....	1.00 @ 1.03	72 @ 86	60 @ 70	62 @ 69	99 @ 1.01	1.50 @ 1.55	74 @ 88
Rye.....	88 @ 90	80 @ 81	80 @ 85	70 @ 83	— @ —	1.40 @ 1.45	1.12 @ 1.20
Barley.....	78 @ 88	75 @ 89	70 @ 75	1.10 @ .125	1.42 @ 1.55	1.75 @ 2.00	1.10 @ 1.28
Oats.....	88 @ 44	88 @ 40	42 @ 48	56 @ 60	77 @ 82	84 @ 87	50 @ 58
Beans.....	80 @ 90	90 @ 1.15	1.85 @ 2.10	1.50 @ 2.60	2.10 @ 2.90	1.50 @ 2.55	1.50 @ 2.35
Peas.....	75 @ 80	— @ —	80 @ 90	— @ —	1.08 @ 1.10	1.50 @ 2.00	1.25 @ 1.80
Butter.....	12 @ 25	12½ @ 21	11 @ 21	12 @ 24	25 @ 30	35 @ 50	80 @ 65
Cheese.....	8 @ 11	9 @ 11½	6 @ 7½	8 @ 11	12 @ 16½	12 @ 22	15 @ 19
Potatoes.....	1.12½ @ 1.75	— @ —	1.38 @ 2.00	1.40 @ 2.00	1.37½ @ 2.50	2.25 @ 3.50	1.75 @ 3.00
Live Hogs.....	5 @ 6	— @ —	3¾ @ 4½	4½ @ 5½	5 @ 5¾	11 @ 13	12 @ 14
Wool.....	40 @ 62½	40 @ 60	42 @ 50	60 @ 65	60 @ 65	80 @ 95	85 @ 75
Beef Cattle.....	6½ @ 10	— @ —	5 @ 8½	6 @ 8½	5 @ 10	7 @ 13	9 @ 18½

Good sound wheat is higher now than at this time last year. Inferior wheat is lower, and it is this kind,

if any, that will pay to export. Corn, barley, oats, rye and peas are all much lower. Beans are nearly as high. Few were planted last summer, and the yield is exceedingly light. There are probably fewer beans (except old ones) in the country than for many years. The probability is that they will bring a high price before spring. Butter is higher than ever before known. Cheese brings a higher price than the English market will warrant, and will probably be lower. Wool, though lower than last year, still brings a good price as compared with the general average. Hogs and cattle are higher than ever before. Potatoes are lower than last year, but considerably above the average. Those who wintered their potatoes last year lost money, time and labor, by so doing, and the probability is that this year less will be kept over than usual, and consequently they are likely to bring good prices in the spring.

In this city a few dressed hogs have been brought in and sold at 16c. to 17c., but the market has not yet fairly opened. White wheat is very scarce, and first class samples have been sold as high as \$2.50. Red wheat brings from \$2.00 to \$2.10. Barley still brings only \$1.00. Oats 45c. Corn is quoted at 90c. @ 95c., but there is little doing and it would not bring this by the quantity. Buckwheat is not yet in market. Hay \$12 @ \$18 per ton. Potatoes sell from the wagons at 60c. @ 70c. Shippers are paying only \$1.25 to \$1.37½c. per barrel for peach-blow potatoes, and \$1.75 for mereers. Onions are dull at 60c. @ 75c. per bushel. Wool quiet at about 60c. Apples \$4.00 @ \$5.00 per barrel. Cider \$6.00 @ \$6.50 per barrel. Mill-feed \$16 @ ton for "sprouts." Butter 45c. Eggs have sold within a few days as high as 40c. @ doz. Chickens and turkeys 18c. @ 20c.

*New York Cattle Market.*—There have been few changes in cattle, sheep and hogs since our last report—good beef cattle bring 16c. @ 18c. @ lb. for estimated dressed weight. (In Boston prices are quoted for the four quarters, including hide and tallow, but in New York prices are quoted by the estimated weight of the four quarters.) The hide and tallow, which are now worth 9c. @ 9½c. @ lb., helping to make up the butchers' profits. As a general rule a steer weighing 1,000 lbs. live weight would be estimated at 660 lbs. Such a steer at 18c. @ lb. would bring \$118.80.

Farmers are taking advantage of the present high price of beef to dispose of their working cattle, quite a number of such being in market last week. A pair that would weigh 3,500 lbs. would be estimated at 2,310 lbs., and at 17c. would bring \$392.70! These are high prices, and it is a matter of surprise that so few poor cattle are sent to market, the average quality last week being better than for several months past. Sheep bring from 7c. @ 8½c. @ lb. live weight. There is an immense number sent every week to New York, indicating what statistics show, that there are a great many sheep in the country.

The supply of hogs was small. The receipts last week were 18,450 head, against 19,631 the same week last year, and 36,624 the same week in 1863. Good hogs bring 13c. @ 14c. @ lb. live weight. "Scallawags" 11½c.



### Do Farmers Want a Market Paper?

A WESTERN New York correspondent of the *Country Gentleman* has been writing some sensible articles "in regard to a remedy for the present very unsatisfactory manner in which wool and other farm products are disposed of," and he contends that the "first and most urgent need is a good reliable market paper—one that will be to the United States what the *Mark Lane Express* is to England." He thinks such a paper would save to farmers hundreds of thousands, if not millions of dollars. We believe he is right, but the truth is that too many farmers care more for a miscellaneous, story-telling paper, than they do for one strictly devoted to their interests. Or rather, perhaps, the farmers themselves care little for an agricultural paper, but think it respectable to take one, and the less agricultural matter it contains the better it suits them. They will take one of these miscellaneous family papers in preference to such a real agricultural journal as the *Country Gentleman*, even though it quotes barley, week after week and month after month, twenty or thirty cents a bushel less than the market price, and mill feed \$10.00 a ton higher than the farmers can buy it for. So far as the *Genesee Farmer* is concerned, we can simply say, that we have endeavored to give a correct report of the markets and have also given our opinion in regard to future prices. Those of our readers who have files of the *Farmer* and will take the trouble to look back at these reports, will be able to judge how far these opinions have been well founded. All that we claim for our market reports is, that they are disinterested, and that the opinion expressed in regard to future prices is based on a thorough study of the subject. There is no other page of the *Farmer* that costs so much labor and thought as these market reports, and it is exceedingly gratifying to us to know that some of our readers at least appreciate these reports, and that they have been the means of saving them from much loss.

Let us take a hasty glance at our record. In April, 1861, before hostilities had actually commenced many papers predicted that prices would advance immediately on the commencement of war. We advanced the opinion (see *Genesee Farmer*, April, 1861, page 127,) that the effect of the war would be to depress prices. Such proved to be the case. That fall and winter corn in the West was cheaper than coal, and was used for fuel! At that time, in an article entitled "What will be the first effect of the War on Agriculture," (*Genesee Farmer*, Sept. 1861, page 267,) we showed that the expenditure of a million dollars a day, borrowed from the future and spent in the present, could not fail to advance prices. Everything was depressed at the time. In this city, 28c. per pound was the top price for wool. In Chicago corn sold as low as 18c. a bushel; oats 13@15c. In New York the very best beef cattle brought only 8c. per pound, dressed weight; good sheep 3c. per pound; pelts 20 cents each; heavy corn fed hogs 3¾@4c. per pound, live weight. Business was stagnant and many men were seeking employment, and it was at this time that we assured farmers that we were on the eve of higher prices, and that we were "sure it would be to their interest to set these men to work in making im-

provements on the land." We need not say how true this has proved. The farmers who made improvements at that time have reaped a rich reward.

All during the war we showed, month after month, that farmers should not sell except for high prices, and when the war was closed, and produce fell, we gave some reasons why our wheat, at least, should bring "high prices" (see *Genesee Farmer*, June, 1865, page 192.) Then in July we contended that "prices in gold will be higher than they were last year," and that "the growing ease in the money market will keep up the price of gold." (*Genesee Farmer*, July, 1865, page 225.) See also an article on the wool market, in the same number. In the August number we advised farmers not to be in a hurry to sell their wheat. Buyers were then "talking" about a dollar a bushel! And in the market report of our family cotemporary for August 26, red wheat was quoted at \$1.40@1.50. Not a word of advice to its farmer readers. On the 28th of August we saw amber wheat sold in this city for \$2.03, and we then said, "there may be a slight reaction, but if the facts given above are to be relied upon it, would seem impossible for wheat to fall permanently." It is generally best, however," we added, "to sell when you can get a good price." (See *Genesee Farmer*, for September, page 288-9.) Sure enough, the reaction came, but was of short duration, and prices since then have been if anything a little higher.

We do not know who the correspondent of the *Country Gentleman* is; but if this should meet his eye, we hope it will convince him that there is one agricultural paper in Western New York that endeavors to give correct market reports, and also lays before its readers such information as may "enable them to decide when to hold on and when to sell." We agree with him, however, that a first class reliable weekly paper devoted to the commercial interests of agriculture is needed—or that the existing agricultural journals should pay more attention to the subject.

### Emigration from Ireland.

THE official report of the Registrar-General for Ireland has recently been published. For the seven first months of this year, "62,262 persons left the country, stating it to be their intention not to return." In 1864, the number for the same period was 84,586, showing in this year a decrease of 22,324. "The total number of emigrants from the commencement of the enumeration at the Irish ports, in May 1851, to the 31st of July, 1865, is 1,591,487."

**TOBACCO FROM EGYPT.**—Bayard Taylor informs the editor of the *Rural Advertiser*, Philadelphia, that he raised the present season a few plants of the real *Latakia Tobacco*, probably the first ever grown in the United States. The seed was brought from Egypt, and he considers the plants he has grown fully equal to any he ever saw on Mount Lebanon, from whence the celebrated Latakia tobacco comes. It is quite a distinct species, having a broad velvety leaf, and a pale yellow blossom. No seed for distribution until another year.



## Inquiries and Answers.

"FLOUR OF BONES"—(T. C.)—We have not used this manure, and do not know the price. We believe the bones are first steamed under high pressure, and are afterwards ground into "flour." Bones contain about 45 per cent of phosphate of lime and animal matter capable of yielding five per cent of ammonia. Peruvian guano contains about 16 per cent of ammonia, and 25 per cent of phosphate. The phosphate of the guano is as soluble as any mechanical process can possibly make bones. We think Peruvian guano at \$100 per ton would be as cheap as bones (ground as fine as flour) at \$40 per ton.

SHEEP GNAWING APPLE TREES—(W. C.)—If the trees are young the sheep may trouble them, but they will not eat the bark of old trees. We have had sheep this year in an apple orchard that was set out eight years ago, and do not think they have gnawed a single one of the trees. Late in the fall or in winter they would be more likely to do harm. Young trees may be protected by smearing the stems as high up as the sheep can reach, with some unpleasant mixture, such as fresh manure from the cow stable, mixed with tobacco water. It can be applied with a stiff broom.

GARGET IN COWS.—In the October number of the *Farmer*, page 323, Mr. Slayton, of Michigan, inquired for a cure for garget in cows. The case he mentions is of too long standing to be cured. Cases of short duration can be cured by the use of spoke root (called by some poke weed.) Give a piece the size of a chestnut every other day for a week, or give two or three table spoonfuls of salt petre. Either of them is an effectual remedy.—G. P., *Fairport, N. Y.*

TAPE WORMS IN HORSES.—I have a pair of horses which for the past year have been troubled with the white tape worm, which I could not get rid of. They were poor and very dull, with hair standing towards their heads, instead of the tail. I tried all remedies I knew, or could hear of, with no effect. A few weeks since I was told to give a tablespoonful of salt every day. I did so and have now a different team, lively and fattening finely with same fare as before.—G. P., *Fairport, N. Y.*

Horses should be regularly salted, whether troubled with worms or not. Good feed, good grooming, well ventilated stables, careful driving, regular watering and feeding at stated hours with free access to salt, will in nine cases out of ten, cure horses of bots, worms, &c. A few carrots would help materially. If the horse is really affected with tape worms (which is not often the case, unless he has been starved when a colt,) a quarter of a pint of spirits of turpentine mixed with a pint and a half of linseed oil, and given in the morning while the horse is fasting, will generally effect a cure. Give some warm bran mash afterwards, and a pint of warm ale would do no harm. Most horses that are thought to be "wormy," are simply troubled with indigestion, and need nutritious food, with great regularity in feeding. We have repeatedly noticed that our horses are troubled with "worms," or "bots," the day after they have been to the city and have gone without their regular noon feed, standing, while heated perhaps,

with their feet in the gutter by the sidewalk, while the driver is taking "somthin' to keep the cold out," in a corner grocery, and who when he starts for home, makes up for lost time by fast driving. The wonder is that horses are not more frequently troubled with "worms" than they are; or rather that indigestion, cholic and other attendant evils, do not carry off more horses than they do.—EDITORS.

POTATO DISEASE IN GREAT BRITAIN AND IRELAND.—The *Mark Lane Express* of October 2, says: "The more we hear of the potato crop, the less assurance have we of its keeping qualities. In some localities the whole growth has been lost." It would seem from the general reports in the English papers that the crop is the largest that has been raised for many years, but that the disease is unusually virulent and destructive.

## SPECIAL NOTICES.

## Life Assurance.

AMONGST companies which we would announce to our readers, is the Union Mutual, of Boston, Massachusetts, organized in 1848, with a cash capital of \$50,000. Its assets are now \$1,250,000, being a remarkable exhibit of prosperity, creditable alike to its management and favorable to the insured, who, sharing in its profits, are now receiving back large dividends, paid when declared, thereby greatly lessening the cost of their policies. Having their large assets or capital well invested in good securities, it is fully if not more safe than any bank, and having a system special and peculiar to itself, by which forfeiture upon all its policies is prevented, the company offers advantages over and above all others now doing business: in addition to all this, its reputation is perfect for honorable dealing as well as financial stability, for during its lengthy business career, involving as it has losses to the amount of \$900,000, it has not been disgraced by having a single law suit, or by making delays in the payment of its claims. (See advertisement.)

## ADVERTISEMENTS.

A FEW short advertisements of interest to farmers—and only such—will be inserted in the GENESEE FARMER at twenty-five cents a line, or \$2.50 per square, or \$25 per column, each insertion, payable in advance.

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A MONTHLY JOURNAL OF AGRICULTURE AND HORTICULTURE.

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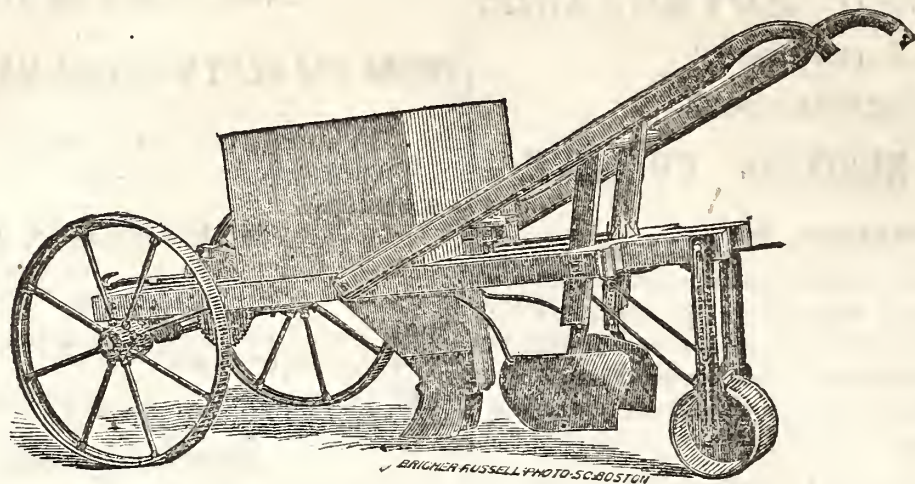
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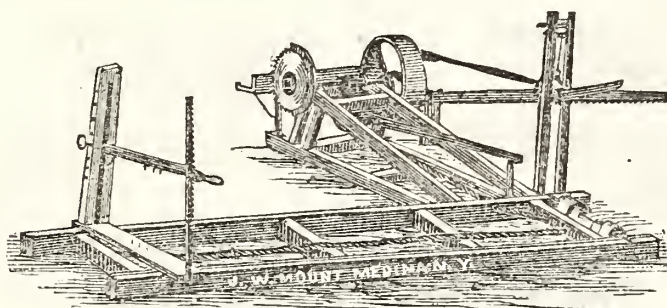
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It rolls up and unrolls like a piece of Oil Cloth.

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It can be laid down by any sensible working man. It is cheaper than any known roofing of equal durability.

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nov

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nov-1t\*

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## The November and December Numbers Free.

To all new subscribers for 1866, whose names are sent in the present month, we will send the November and December numbers of this year, *free*. This applies to clubs as well as to single subscribers.

**LOST NUMBERS OF THE FARMER.**—We can supply any numbers of the *Farmer* to those who have lost or failed to receive them. This we do without charge, as we are anxious that our readers should preserve the entire volume.





## AN IMPORTANT ANNOUNCEMENT.

### TRANSFER OF THE GENESEE FARMER.

We have to announce, with mingled feelings of pain and pleasure, that this is the last number of THE GENESEE FARMER that will be issued in Rochester. It will hereafter be united with *The American Agriculturist*, published by Messrs. Orange Judd & Co., 41 Park Row, New York City.

*The Agriculturist*, which is well known to many of our readers, is a very large and beautiful, as well as a very valuable, practical journal, devoted to the Farm, Garden and Household, and is just entering upon its Twenty-Fifth Annual Volume. Having now more than a Hundred Thousand subscribers, it has the means and facilities for furnishing a very great amount of good reading, beautifully illustrated with interesting and instructive engravings, and at a very low price. (The subscription terms are \$1.50 a year; four copies for \$5.00; ten copies, \$12.00, and twenty or more copies at \$1.00 each.) It has a large force of intelligent, practical men as editors. The senior editor, Mr. Judd, was brought up a farmer in Western New York, and is in every respect well qualified. *The Agriculturist* will therefore, we are sure, be more interesting and useful to the farmers and fruit growers of the Genesee country than THE GENESEE FARMER could possibly be. It will be all that THE GENESEE FARMER has been, with other valuable features in addition.

Those who have subscribed in advance for THE GENESEE FARMER for 1865, will be furnished with *The Agriculturist* for 1866, without extra charge, or, if they prefer, the money will be refunded. We trust, however, that all will feel it a pleasure to continue with THE GENESEE FARMER in its new form and name. We can promise them a paper in every respect superior to the old one, of twice its size, and but a little higher in cost.

We have been induced to make the change for several prominent reasons—*First*: The uniting of the editorial force of two papers, with only one publishing department, will be for the manifest benefit of all concerned, as all the readers of both journals will have the advantages of the two at only the cost of one. *Second*: We find that publishing a paper as well as editing it, and managing a farm at the same time, is a little more work than one man can well attend to. Either the farm or the business of the paper must be neglected. *Third*: The Editors and Proprietors of *The American Agriculturist* thought that the "Walks and Talks on the Farm," and other matters in THE GENESEE FARMER, were worthy of a more extensive perusal than they had in a journal having only ten to fifteen thousand subscribers, and they asked us to unite THE FARMER with *The Agriculturist*, where it would have more than a Hundred Thousand subscribers, and probably not less than *half a million* of readers. Is it any wonder that we yielded to so flattering an appeal?

It is indeed with feelings of sincere regret that we discontinue the name of the old GENESEE FARMER, but we anticipate with pleasure visiting our friends from month to month for many years to come, in a garb so attractive that young and old will welcome these visits as never before.

As this arrangement relieves us of all *business* cares in regard to the paper, we hope to be able to work more as well as to "Walk and Talk" better on the Farm. Let all our old subscribers take *The American Agriculturist*, and we are sure the change will give them entire satisfaction. Though that paper is sent only to those who subscribe for it, and is stopped when the subscription expires, we have requested Mr. Judd to send a sample copy to all our present subscribers to look at, fully assured that nothing more will be necessary to ensure their taking it, and thus continue the pleasant intercourse we have so long enjoyed with them. With the expectation of meeting all our friends again next month, in the new dress, we will not stop to write any valedictory, or say any farewells.

JOSEPH HARRIS.



## WALKS AND TALKS ON THE FARM.—NO. 24.

I SAW a farmer in the city to-day (October 22,) with a load of good Mediterranean wheat. He took in a load a few days before and sold it at \$2.10 per bushel. To-day all that he had been offered when I saw him was \$1.95, and he was hesitating whether to let it go or take it home again over fifteen miles. It was a cold, drizzly day, and both he and his horses looked gloomy enough. I have sent things to the city to sell and been caught in the same way, and have made up my mind, as far as possible, never again to send anything not previously contracted. Wheat will doubtless be up again next week, but to-day the reports from "below" were unfavorable, and buyers were very shy.

I have not yet drawn out the manure that I piled last spring. I have been waiting for that "leisure season" which seems so long in coming. I intended to put it on grass land to be plowed up next spring for corn. For this purpose it should have been drawn out and spread in September. By this time it would have given the grass a good start, and next spring there would have been quite a crop to turn under. This would serve to keep the soil light and warm, which on heavy land is exceedingly desirable for the corn crop. Whether on such land the manure itself has as much effect as if applied in the hill, is somewhat doubtful.

I shall manure an acre or two of this sod land next week; and the rest of the manure I propose to draw on to the young clover. My own opinion is, that as a general rule, this is the best way to apply manure on a wheat farm; especially on one that is "run down." When you can grow clover, you can grow almost any other crop, and it is certain that a top dressing of manure in the fall will greatly benefit the clover. It will force it forward early, and if needed it can be cut the latter part of May or first of June, as a green food for horses. I would have given a good price for an acre or two of such clover last spring.

I have sold THE GENESEE FARMER! You are astonished, and no wonder. I am astonished myself. Ten days ago I had no idea of making any change. The prospects of THE GENESEE FARMER never were brighter, and I disposed of it simply to get rid of the care and labor of publishing it. I have always thought that we had too many agricultural papers in this country and too few really competent editors. If I am not mistaken in the signs of the times we shall see great changes in American agriculture during the next five or ten years. We shall have higher prices for our produce, and intelligent farming will be more profitable than it has hitherto been. Our agricultural colleges will turn out a more intellectual class of farmers. The cities will give us "new blood," more capital and en-

terprise, with better business habits. We shall have more system, more science, more machinery, and less back-breaking, brain-benumbing drudgery.

It is difficult to see how we could have had good agriculture with cheap land, cheap produce and high labor. Now our land is no longer cheap. In this section it is, all things considered, dearer than it is in England. That is to say, a farm can be rented in England for less money than the interest on the money it requires to buy such a farm in Western New York. This is contrary to the general opinion, but it is nevertheless a fact. I know of many English farms, with good houses, complete buildings, fences in perfect repair, excellent roads, in close proximity to market, with land in good heart, clean, and thoroughly under-drained, that are rented for \$7.00 per acre. Such farms could not be bought here for \$150 per acre. Money is worth 7 per cent, and in addition the taxes in this county are 3 per cent. So that such a farm would cost us an annual rent of \$15.00 an acre. "Cheap land" is therefore, no longer a reason for poor farming. Then as to prices, they are now higher here than they are in any other country. True, labor is high, but that is a reason for making it as efficient as possible. We can no longer afford to grow poor crops or feed ill-bred cattle, sheep and pigs. We must farm better, and we shall.

"What has all this to do with selling THE GENESEE FARMER?" Simply this: We are going to have a better class of farmers, and they will want a better class of agricultural papers. Now, it is impossible for any one man to make a paper adapted to the wants of intelligent farmers. He would need a thorough knowledge of practical agriculture and horticulture. He should be a good mechanic, a good chemist, botanist and veterinarian. He should in short, be a Stephens, a Lindley, a Downing, a Liebig, a Gray, a Simmons combined. Now, seeing there is no such man, the next best thing is to get half a dozen of the best men we have on one paper, instead of letting them divide their energies on half a dozen different journals. Centralization is the tendency of the age. THE GENESEE FARMER and *The American Agriculturist* combined must be better than THE GENESEE FARMER alone. It will be all that it has hitherto been, and its readers will have the writings and experience of such men as Judd, Thurber, Weld and Todd in addition.

When in New York I went to the Bull's Head Cattle Market. I had traveled all night, and had had no breakfast, and was in a condition to sympathize with the poor beasts standing there in open pens, gaunt and woe-begone. They had evidently endured much tribulation since they left the quiet and well stocked barnyards and pastures of their farmer owners.

It seems that there are a class of dealers who buy cattle and slaughter them, selling the carcass to the butchers. One advantage of this system is that butchers having customers who will buy none but the best pieces, can take the hind quarters, while the fore-quarters are sold to butchers whose customers prefer cheapness to quality. There is a growing demand for



prime beef, and the butchers find it difficult to get enough of the "best pieces." This is a point which farmers are too apt to overlook. There are those who think that if cattle are of the same age and weight, and are equally fat, one is as good as another, but it is a great mistake. There are pieces of beef from the same animal that sell for nearly three times as much as other pieces; and the object of breeders has been to develop those parts of the animal which afford the best pieces. In this they have succeeded in a degree which is truly wonderful; and the value of Shorthorn, Hereford, Devon and other improved breeds of cattle, is not merely that they will mature earlier and fat more readily, but that the carcass is more valuable from the greater weight of the best pieces of beef.

The same is equally true of sheep. Horns have been bred off, the legs shortened, and the offal reduced to the minimum point, while the carcass has been mere fat and flesh is not all that is required.

I saw a farmer to-day who says he expects to sell twelve hundred dollars worth of pork. Lucky are those farmers who have a good supply of pigs. The majority of us are short. High as are taxes, two or three good pigs will pay them on a large farm. In fact, taxes, *in pork*, are not as high as before the war.

The wheat crop never looked better in this section than at the present time. The weather has been quite favorable, and there was a good breadth sown. I hope still to see the day when the "Genesee country" will occupy its old position as a wheat-growing section. There is no reason why we cannot raise just as good wheat as we ever did.

Last month, in reference to my horse that had an attack of spasmodic colic, I remarked that it was not easy for an inexperienced person to tell the difference between an attack of ordinary spasmodic colic and inflammation of the bowels. John Johnston writes me on the subject, and says:

"I will tell you how you can know inflammation of the bowels from colic in the horse. In the former the pulse is hard and wiry; in the latter, it is full, large and elastic. The best place to feel the pulse is inside the jaw bone, a little below the broadest part. By passing the finger up the inside of the jaw any novice can feel the pulse. I studied diseases of the horse with much care and from the best authors I could get. I have always found spirits of turpentine—about one gill for a dose—diluted with a pint of warm water, an instantaneous cure for colic. Nothing but bleeding to the fullest extent, even to fainting, will relieve inflammation in the bowels, and perhaps not that. Injections are good, but very free bleeding first."

I know that Youatt and other good authorities of the old school recommend bleeding for inflammation of the bowels, and there are cases, perhaps, where it is necessary. But as a general rule the horse will need all the vitality he has, and it is manifestly unwise to reduce him by bleeding. External blisters and doses of laudanum is the best treatment, and certainly the

safest. Give no purgative; keep the horse perfectly quiet; bandage his legs; blanket him; give him a little warm oatmeal gruel; and give laudanum enough to ease all pain. Do not be afraid of it. Give two table-spoonsful, and if that does not quiet the pain in a quarter of an hour, give four table-spoonsful, and keep giving doses of two table-spoonsful often enough to keep the horse quiet.

Mr. Johnston says he is fattening this winter 305 good wether sheep. I am inclined to think more sheep will be fatted this winter than ever before; that consequently prices will not be as high next spring as they were last spring. But in this I may be mistaken. The Deacon, who has lately been traveling considerably, says there is less stock of all kinds in the country than he ever knew before, and he thinks cows, beef cattle and sheep will be higher in the spring than ever before known. I have no doubt he is right; *provided* things go on as they are. But if Congress should pass laws for reducing the currency and a panic should ensue, prices might drop as far below their nominal value as they are now above it. Agricultural products would fall less doubtless than other articles, but would be more or less affected by the stagnation in trade that would be sure to ensue. It cannot be that the present state of things can last always. There must be a change, and it will be the part of wisdom to prepare for it.

The wool market is quite dull at this time, and it is not probable that wool will be any higher. Sheep this week are lower at Albany, owing to the abundance of the supply. In the country, however, it is not easy to pick up good sheep, except at prices very much higher than they could have been bought for last September. There is an unusual abundance of fodder in this section and farmers can winter twice the stock they could have kept last year.

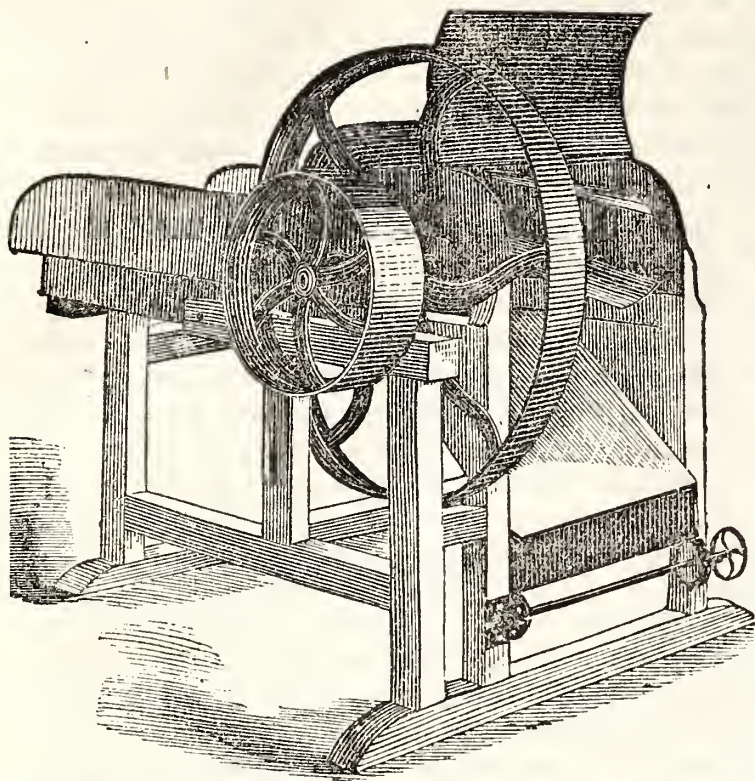
Apples are very dull. I was talking with a dealer in New York, and he said the high prices checked the consumption to such an extent that he could sell five barrels last year to one this. I was offered good apples for five dollars a barrel, including the barrel. These same apples came from Western New York, where thousands of barrels have been sold for five dollars, without the barrels. Somebody must have lost by the transaction, as the barrels cost forty cents each and the freight sixty cents more.

The apple crop of this section has turned out far better than was expected. Cider brings from five to six dollars a barrel, and never before was as much made in this section.

I cannot see why there should be such a prejudice against buckwheat. There is much land on which it is the most profitable crop that can be grown. On low land, which is too wet in the spring to plant corn, it is certainly better to sow buckwheat than allow it to be occupied with weeds and coarse grass. Where you can get twenty bushels per acre, and sell the buckwheat for ninety cents or one dollar a bushel, there are few grain crops that afford more net profit. The straw makes pretty fair bedding for horses and cattle and helps to swell the manure heap.



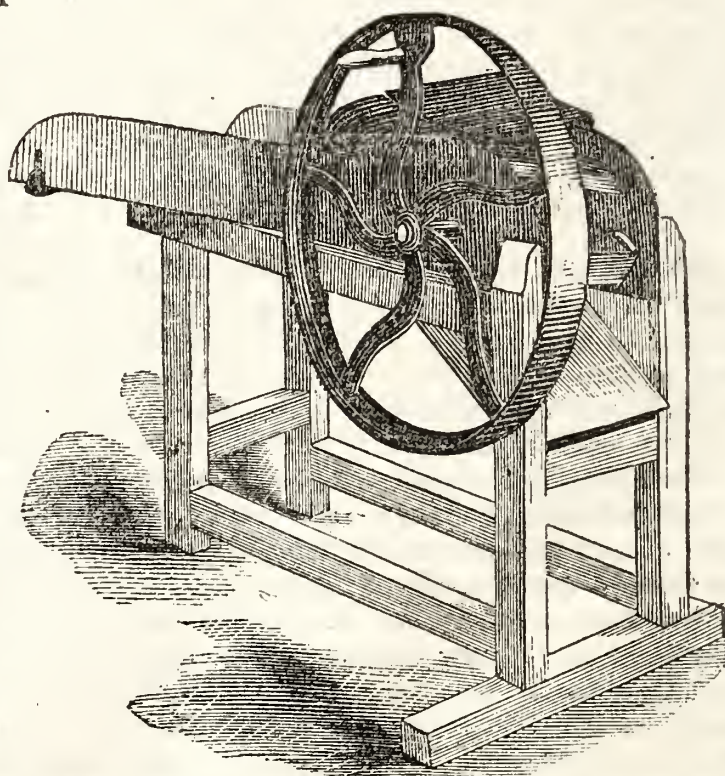
## CUTTING FEED FOR STOCK.



this is a point which those who have had experience in using machinery will appreciate. We annex a couple of illustrations of these machines—one of the hand cutter and the other of the large size, driven with horse power. The following description of the machine is given by the manufacturers, Messrs. Pitts & Brayley, of the "Rochester Agricultural Works" Rochester, N. Y.

"These machines are constructed with four knives having an upward cylindrical cut against a throat piece. It is built in the most compact and durable manner, all the shafts being of wrought iron, nicely fitted, and those most liable to wear in boxes that can be replaced at a trifling expense. The manner in which the knives are attached to the heads is another great advantage, there being besides the bolt that holds them on as a set screw, at the back of each end, which when the knives wear away, can be screwed up, thereby having at all times a firm support against the back of the knife, which is very necessary. The throat piece is also made adjustable, so that it can be moved toward the knives as they wear away. The adjustability of the knives being so simple that any farmer can keep them in perfect order. It is also arranged to cut different lengths by the simple changing of the feed gear. Its strength, durability, compactness, self-feeding, adjustable throat and knives, simplicity, cutting all kinds of feed equally well, different lengths of cut, operated by hand or power, all combined, give the "Empire Feed Cutter" the decided preference over all other machines. There are five sizes made, No. 1, price \$25.00 for hand use only. Nos. 2 and 3, price \$30.00 and \$35.00, for hand or power, and Nos. 4 and 5, price \$80.00 and \$90.00, for power exclusively."

Further information can be obtained by addressing the manufacturers, Messrs. Pitts & Brayley, Rochester Agricultural Works, 100 South St. Paul street, Rochester, N. Y.



THE Sandusky Register says that on Wednesday last seventy tons of grapes were shipped from that place, thirty tons of which came to Detroit.

We shall not wish our old friends "good bye," as we hope to meet them all again next month. We can promise them a better paper than we have ever been able to furnish.

PRUNE GRAPES NOW.—There will be no better time than the present for pruning the grape vines. If deferred into the winter, pruning is an uncomfortable job and likely to be neglected until too late in the spring, when the vines will suffer by neglect and receive damage in the handling. Do it now.



## LIQUID WEALTH LOST.

BY COSMO.

FELLOW FARMERS—will you hear a few words of facts from a delver in the dirt like yourselves, without showing *grit*? The presumption is strong that you will; for although notoriously the most wasteful, slovenly set of fellows about our own affairs, we are just as notoriously easy tempered and good natured. Not half so fractious and fiery as lawyers, doctors, merchants and mechanics generally.

What I want to say to you pretty plainly, is to tell you what—what—what shall I call you? Ah, yes! that's a bearable phrase—something softer than—*fools*, but amounting to about the same thing.

What foolish fellows you are, to let run to waste every year so much liquid wealth as counted in money value would purchase a ton of the best guano ever imported. And, if you hold the life of your land worth anything, of more practical service to you than the whole Chinchá load of guano dumped on your farm would be.

In the first place, there is the barn yard. You like dry, comfortable barn yards, I see, and have so contrived yours that it is very comfortable and costly too, as you will agree, if you will only step this way a minute. Just look along down this drain here, leading out of the southeast corner of your barn yard, and down into the swamp there.

"Why that drain carries off all the water from the yard, sir, leaving it dry and comfortable."

"Yes, but don't you see, my dear sir, it is carrying off also about all that is worth carrying away out of your barn yard, in the shape of liquid manure. Now, is there anything like economy in paying the prices you have done this, and will have to do next year, for mercantile manures, and then permit such a waste of good, home-made material as this? I, for one, don't believe it."

"But what am I to do? I cannot permit my cattle to stand in the mire, and you see the yard is naturally pretty wet."

"Yes, I see; and my advice is to make it a good deal wetter just as soon as you can conveniently. Don't stare that way—I am in earnest. Dam up this drain; plow and scrape out the center of the barn yard, until you have got hard bottom, and made a dish of it. Let the drainage from all sides flow into that basin; the stock will not run in there. They know too much for that, and there will be plenty of dry footing for them around the outside of the central pond."

"Lay hold of every leisure hour; there will be a good many such during the late fall, winter and early spring; haul in from headlands, uncultivated corners—anywhere that you can gather it up—the best loam to be had, by cart loads; dump it in the

pond of liquid manure; continue the practice till spring opens, keeping sluices open each way into the center of the basin to maintain the drainage. The loam will absorb the liquid in the spring, scrape in, and shovel over, so as to compost with the loam all the surrounding manure, and you will have a fertilizing agent, better than Peruvian guano—better than two thirds of the trash sold as mercantile manures, and a great deal of it, at a cheap rate."

Next let us turn our attention to the pens of stock, and hogs fattening for pork. That is a slovenly, wasteful practice—unfloored pens, or so floored that all the liquid runs down through the joints, or out, all around the pen, wherever it can find a vent. The better way, by far, is to have the floor tight, with pitch enough to let the liquid run readily in one direction, and at the outlet have a watertight box to receive it. Clean out the pen every day as regularly as you do your horse or cow stables. The pigs will thank you, and pay well for it too.

Have conveniently at hand, always under cover, a compost heap of loam, now and then a load of swamp muck, lime, wood ashes, stale brine from beef and pork barrels, whatever of refuse salt you may have, with every dead calf, lamb, chicken, cat, rat, and worthless cur that may chance to die about your premises, buried in the pile. Convey to the compost heap at intervals of a few days, the liquid manure from the hog pen; have a funnel shaped hole in the head of the heap, and into it pour the liquid. Percolating downwards and laterally, it will soon become absorbed by, and form a part of the composite pile, which having been well shoveled over, and thoroughly amalgamated, makes a powerful concentrated manure—the very best you can have for cabbages, all sorts of vines, and vegetables of every description, that you wish to hurry forward early, and come in of the best quality.

And then there is the kitchen waste of liquid wealth thrown away! Monstrous waste—tubs of soap suds every washing day, pots and kettles of water in which meat, potatoes, cabbages and turnips have been boiled, and several times a day great pans of dishwater are "sloshed" out into the back yard, making filthy pools for young ducks to "squiddle" in—a foul stench in warm weather, and a hot bed breeding hole for flies, and an objectionable kitchen swamp altogether. It is a wicked waste of liquid wealth.

Just such practices used to prevail at our house. But we have some time since learned better. A cheap, simply constructed spout carries every mite of such liquids to a receiving reservoir placed so far from the kitchen porch that we have no objectionable smell from it. Into this conveyer go all the slops, soap suds and dish water from the kitchen,



and during the winter they go from the tank to the compost heap, and are disposed of in the same manner as the hog pen liquids.

During the warm weather of summer we apply the material to our thirsty garden vegetables, towards night, and let me assure you, we find it profitable. Four, I think, of our neighbors who still continue the slovenly, wasteful practice of "sloshing" all their liquid kitchen wealth out on the ground, often stop to admire our growing vegetables; and frequently they make the inquiry, "How do you manage to have all your garden things so green, nice and healthy, when ours are all parched, wilted and shrivelled up with the drouth?" We always answer: "Slops, kitchen slops!" But they don't seem to take the hint.

#### THE LARGEST BARN IN NEW YORK.

IN his interesting "Notes from the Dairy Regions," Mr. Willard, of the *Utica Herald*, gives the following description of a barn recently erected on the farm of Lyman R. Lyon, at Lyons' Falls, in Lewis county. His farm consists of 800 acres of cleared lands, and he keeps a dairy of ninety cows:

"The barn is 221 feet long by 48 feet broad. It sets upon a wall 20 feet high, which contains a thousand yards of masonry. The drive way is 30 feet above the bottom, and twenty-one wagons can be unloaded at once from the barn floor. The mows on either side of the drive floor have capacity for holding 650 tons of hay before you get above the level of the barn floor, and it is proposed to have machinery driven by water power for catching up the whole load and dumping it into the bays at once. The stables in the basement will hold two hundred head of cattle, and near by is an immense muck bed where any amount of this material may be readily had for mingling with the manures or using in the stables to absorb the liquid manures. There are thirteen ventilators running from the stables to the top of the building, the height of which to the peak is eighty feet. In the basement it is proposed to have a root cellar and machinery for doing all the work of threshing, cutting roots and feed, carried by water power which is conveniently near. This barn cost in the neighborhood of \$12,000, and when completed, as to machinery, &c., will probably be the most interesting barn structure in the State."

SHEEP are not doing well in Illinois, many of the farmers having lost one fourth of their flocks since shearing, from the scours. This is probably owing to the wet season affecting the feed.

A HOG was exhibited at a fair in Fountain county, Indiana, recently, that weighed 1,118 pounds. The fact is well authenticated.

#### THE GREAT WEST.

"THE *Evening Post*, in the course of a generally excellent article on emigration to the South, says:

'Fortunately for the Southern States, as Mr. DeBow remarks, and as we have frequently shown, the period has arrived in the settlement of our country when emigration is compelled by natural obstacles to turn back from further advance westward. Our western settlements have reached the verge of the great interior desert; they already trench upon sterile soil; they now occupy lands so distant from a market, that the farmer's products become next to valueless, through the expensiveness of transportation.'

"We assure the *Post* that this statement is essentially mistaken and unjust.

"True, there is less fertile land unoccupied in the West to-day than there was sixty years ago; yet there are still immense bodies of it—hundreds of millions of acres, as inviting as any whereon the sun ever shone. The Federal government has still many millions of acres that it concedes to settlers on the payment of ten cents per acre (\$10.00 per quarter section,) to pay the cost of survey and sale only. Then the States have large areas granted by Congress in aid of agricultural and mechanical colleges, which can be bought in fee simple for \$1.00 per acre. Then there have been millions of acres more granted in aid of railroads and other internal improvements, which are held higher; but which are really cheaper than those lower priced. Even those of the Illinois Central, being immensely enhanced in value by the construction of that noble work, are really cheaper than Ohio lands would have been fifty years ago, if actually given away. And then there are thousands on thousands of individual holders, who, pressed by debt and taxation, would gladly 'unload' on almost any terms. All these are many miles this side of the sterile desert or 'plains;' while there is some very good land along the eastern base of the Rocky Mountains, beyond 'the plains.'

"Nor is it true that the new lands now for sale are 'so distant from a market.' The Genesee Valley in our State was in good part paid for with wheat grown thereon at an average of not more than fifty cents per bushel. That valley was practically farther from New England—much farther from markets—fifty or sixty years ago than Minnesota or Kansas now are, and reached with greater difficulty. The farmers of Minnesota are now selling their wheat quick at 75 cents to \$1.10, cash, and they have piles of it. And the far west finds great markets for its produce rapidly expanding in the mines of Colorado, Montana and Idaho. Give us the Pacific Railroad to Denver, and they will send ten dollars' worth where they now do one, and receive their pay in gold. We heartily approve all efforts to fill the South with new industrial life; but the West is still inviting, and proffers happy homes to many millions more of honest workers. The West never presented



greater attractions to immigrants than she does to-day."—*New York Tribune*.

REMARKS.—The farmers of the West, like those of the Genesee Valley, may be able to pay for their land with wheat at 50 cents per bushel. The land has been heavily manured by nature, and as long as this natural manure lasts wheat can be raised at a cheap rate. We do not object to farmers using up this natural manure in paying for their farms. But it may be well to inquire what the land is worth after it is paid for? What would our farms in Western New York be worth with wheat at 50 cents a bushel, and other produce in proportion? Would any sane man take the best farm in Monroe county as a gift, and agree to pay the taxes.

Is there any probability that during the next twenty-five or thirty years prices will advance in the West, as they have during the past thirty years in the Genesee Valley? If so, the West is the place for young farmers; but if prices do not advance the Western farmer; after his "natural manure" has been removed from the soil, will find little profit in farming.

Let us take a farm in Minnesota and another in Western New York. Reduce them both to the same condition, and assume that they will both produce 20 bushels of wheat per acre, and other crops in proportion. The wheat raised on the Minnesota farm will sell quick at 75 cents to \$1.10 per bushel cash; that raised on the Western New York farm sells equally quick for \$2.00 to \$2.50. Taking the highest figures in both cases, the account would stand thus:—

Minnesota farm—20 bushels of wheat@1.10.....	\$22.00
Western New York farm—20 bushels of wheat@2.50 .....	50.00

The produce of the Western New York farm brings \$28.00 per acre more than that from the Minnesota farm. At seven per cent, this is the interest on \$400 an acre. Now, if a farm in Western New York is worth only \$100.00 per acre, how much, in the case assumed, would the Minnesota farm be worth?—EDITORS.

FEEDING STOCK.—Little and often is the rule. How little and how often may be asked. So little that the stock will eat up clean what is given them morning, noon and night; and in the long, cold nights of winter, a feed just before bed time, say about 9 o'clock, is advisable. This we call often; that is, four times a day. Though the quantity should be such as to be eaten up clean; yet it should be enough to keep the stock in good, thrifty condition. No starving or half feeding them. This does not pay.

STEEPING SEED WHEAT.—There are many methods of steeping, brining, and liming seed wheat, and they are all intended to prevent smut.

#### AGRICULTURE IN OUR COMMON SCHOOLS.

THIS is a matter of some importance in view of the future of agriculture in our country. Some years ago the plan of instructing the children of the rural population in the elements of agricultural science, while attending the district schools, was introduced. A text book explaining in a concise and lucid manner the nature of the plants the farmer cultivates, the animals he raises, the character of the soil he cultivates, the processes by which its fertility can be maintained, the action of light, heat, &c., upon both animal and vegetable life, and intending by its study to lay the foundation for a higher agricultural knowledge as the pupil advanced in age and his circumstances would allow of its prosecution, was prepared under the auspices of the Massachusetts State Board of Agriculture. We do not know with what success the attempt has been attended, but are satisfied that the principle is a right one, and one that may be adopted in the West with profit to the rising and future generations.

It is not of one half the importance for the farmer's boy to know the capitals of all the empires, kingdoms, confederations or states of the old world, to have at his tongue's end the names of all the rivers, where they take their rise, and where they empty, as it is to know the way to make a barren soil productive, or to be able to prevent the failure of a crop, to save a valuable crop from blight or insects, or know how much seed is needed per acre, and when and how to plant it.

As preparatory to entering the agricultural colleges, the influence of such a primary education would also be invaluable. The seeds thus sown in the district school might lead to great prominence and usefulness in the recipient. As the management of these schools is principally in the hands of farmers it will be an easy matter for them, to make the trial of introducing some text-book of the kind we indicate into them the coming winter term.—*Prairie Farmer*.

REMARKS.—The book above alluded to is Emerson & Flint's Manual of Agriculture, and while we may not be able to approve of all its teachings it is unquestionably the best elementary work on agriculture published in this country. We are desirous of putting it in the hands of every farmer's son, and have accordingly offered it as a premium to those who get up a club of ten subscribers to the FARMER.

The great difficulty in the way of teaching agriculture in our district schools is the want of competent teachers; and one of the benefits of our agricultural colleges will be in this very direction. They will teach our young men, who will not only be better farmers themselves, but will be competent



to teach agriculture to others. The colleges will help the district schools, and the district schools will help the colleges.—EDITORS.

#### FARMING IN CALIFORNIA.

THE San Jose *Mercury* gives the following account of a three thousand acre farm at that place, which is worked by a Professor Gates: "One would suppose that the professor would have his hands full to carry on a first-class educational institution, with nearly 200 students, and a three hundred-acre farm at one and the same time; but with competent assistants, and his business thoroughly systematized, he manages the whole with the regularity of clock work. He has on this ranch 2,500 acres of grain, besides several acres of hay. Some of his earlier sown grain stands now at least three and one-half feet high, and is as rank and thick as it can grow. One field of a thousand acres would astonish the optics of any New England farmer. He estimates that his entire yield will not fall far short of 40,000 sacks of 100 pounds each. To prepare this immense tract for seeding required the services of about thirty-five men and eighty horses and mules for three months. It will require sixty men to do the harvesting. The work is all done with the most improved machinery. For instance, there are on the ranch no less than nine gang plows, twenty-five wagons, three headers, five mowers and reapers, one splendid steam thresher, and other farming implements without number. To form some idea of the expense attending the securing of this immense crop, we need only mention that the sacks alone will cost about \$20,000. We believe it is the largest tract in the State tilled by one man."

#### LARGE AND SMALL CORN CROPS.

A CORRESPONDENT of the *New England Farmer* says, the drouth was so severe in his neighborhood, that one farmer "harvested only eight bushels of very small corn from two acres!"

On the other hand, Mr. Williard, of the Utica *Herald*, who delivered the address at the late fair at Dryden, Tompkins county, New York, tells of a corn crop raised last year in that town by Joseph McGraw, Esq., on three acres of old turf land. The yield was "four hundred and twenty bushels, or a hundred and forty bushels of shelled corn per acre"! Mr. W. adds: "The land had been in sod for a number of years, with an annual top dressing of barn yard manures at the rate of twenty loads per acre. This is one of the largest yields on record this side of the great corn lands of the West, and shows what the soil of Tompkins county is capable of doing under good cultivation and thorough management."

THE cultivation of the earth is humanizing.

#### CAPITAL AND PARTNERSHIP IN FARMING.

THE following remarks were made at a recent meeting of the Wigton Farmers' Club, and may prove suggestive to some of our readers:

"I therefore proceed with an easy conscience to advocate *large farms*, as providing, under proper arrangements, what small farms cannot do—namely, the foundation for division of labor, mechanical appliances, consolidation and increase of capital, and for a profitable high pressure rate of production.

"To bring about slowly, but effectually, this combination of advantages, there seems to me to be one simple recipe—farm partnership; and as most necessary to effect this result—systematic farm accounts.

"My plan is this: Let two farmers join together, the one to look after the tillage, the other to take charge of the stock, and associate with them a third, with sufficient capital to farm some 600 to 1,000 acres, on the best system. The third may be a sleeping partner: or, say the younger son of a country gentleman, to whom might be assigned the charge of the books, the superintendence of the machinery, or such other special branch of farm business as he may be capable of managing. From the over-crowded state of the professions such an opening for the younger sons of country gentlemen who might be adverse to trade would, I apprehend, be eagerly sought. I can hardly conceive a better position for a young man of good connection than a partnership with one or two clever agriculturists; and I can conceive no more advantageous mode than this by which a couple of clever farmers may find scope for their energy, and utilize their experience and ability to the best advantage. Or, as I have said, the monied partner might be what is termed a sleeping partner, the division of profits being in proportion to the work done, or money supplied. To such a firm, of course, book-keeping would be essential; and, to a firm so constituted I conceive no bank would refuse such temporary accommodation for legitimate trade purposes, as it might from time to time require."

GARGET IN COWS.—In the last issue of the *FARMER* R. W. Slayton wishes to know of a remedy for garget, and a cure for a cow that has not given milk out of one of her teats for two years. The cow will not, under any circumstance be likely to give milk again from the affected teat until she calves. Should there be any obstruction then in the teat it should be removed by inserting a large knitting-needle and keeping the milk passage open, and milking the teat regularly. If the cow is gargetty, give her eight drops of the Tincture of Aconite, dropped in some meal. If a remedy is not effected, give the cow six drops the next day as before, and she will be likely to be cured. I have tried the Aconite in cases of garget with the most admirable success.

D CUTTS NYE.

Lexington, Mass.



## LETTER FROM DOWN EAST.

FRIEND HARRIS: Until to-day, I had not seen a copy of THE GENESEE FARMER for nearly two years, but finding your number for November among our exchanges this morning, I pocketed it, expecting a treat in the way of an hour's quiet reading, and I was not mistaken. You look as natural and fresh as of yore when the leaves of THE FARMER were the first of the monthlies that tempted my paper knife. Its columns are stuffed, (yes, that's the term,) *stuffed* with valuable, interesting, and practical matter for farms and farmers' families. And mind you, when I put that word *practical* in italics, I meant it. The articles are not only readable, but they are of use and for use. Your "Walks and Talks on the Farm," are admirable articles—the best in your pages. I always did like to hear a person *talk on paper*. And so few can do it; besides it is plainly evident that you are experimentally acquainted with your subject, and those are the kind of persons we always like to listen to.

I notice but few of your old corps of correspondents, though the familiar initials of Mr. Williams still heads the "Notes for the Month." Mr. Bement still contributes, but where are the hosts of others, did they go to the war, or have they retired. I must particularly inquire for your venerable correspondent "C. D.," whose familiar weather notes I miss.

But I proposed when I took up my pen to jot down a few notes in regard to agricultural matters in this extreme of our country. So I must stop my rambling cogitations and proceed to the business ere I reach my limits.

The farmers of "Down East" have no cause to complain of crops or weather the past season, although the long drouth, late in autumn, was quite a hindrance in some respects, yet the crops were mostly grown before it came on. Our hay crop was good, and is now selling in the market at \$12.00 to \$16.00 per ton. Grain crop fair; oats selling for 75 cents, and barley for 90 cents a bushel. Potatoes were good, and a large crop grown; they now command 65 cents a bushel. Corn was a very good crop—better than for many years.

Stock of all kinds is high. Milch cows bring from \$75.00 to \$85.00 a head, dairy products being in demand at high prices. Butter 45 and 50 cents per pound; milk, ten cents a quart. Sheep are higher than in Brighton market, although there has been a decline during the last week. Stores are held at \$3 50 to \$4.50 a head.

The weather during the past week has been fine, as we have just experienced our Indian summer. At noon of the 17th, "the mercury went up to 64°. But the ten days previous were very cold and disagreeable. At 7 A. M., the 12th, the thermometer

marked 12°. First killing frost was on night of September 26th.

But my sheet is full. Good luck and prosperity to you and all the great family of farmers.

Yours truly, GEORGE E. BRACKETT.

Belfast, Me., November 18, 1865.

## POULTRY IN FROSTY WEATHER.

THERE is something exhilarating in frost. When the early morning breaks on the earth covered with rime, and the hard ground seems to spurn the foot that treads on it, and the sun rises like a disc of burning copper, there is something cheerful about it. Nature has donned her masquerade dress of white. Your horse cannot contain himself; and the steady old friend for some months past content to shake his head or whisk his tail as the only answer to what a grand daughter of ours calls a "good cut o' the whip," now seeks to devour space, and to try conclusions with your strength, or that of your reins. In like manner your tried friend, the old dog, gambols, and, in the gleesomeness of his feelings, he picks up a shred of cloth in the field, and shakes and tosses it for very wantonness. The appearance of real winter is then a holiday for many, but (ah! those *buts*) not to all. It is none to the poultry. Water is frozen; the ground is so hard they cannot scratch; there is not an animal of any kind on its surface; and they must depend on their owner for everything they want. See they lack nothing. First, they must have water. Few people have any idea of the suffering caused to birds by the lack of water. Their power of maintaining life on the smallest possible quantity of food is wonderful, provided they have water; but a practised eye can tell in a dead fowl or pigeon whether it suffered or not from thirst. The skin becomes hard, dry and red; the flesh contracts, as it were, and becomes brown, and the whole body looks as if it had been suddenly shrivelled or dried up. You must bear in mind they require more food and better than they do in milder weather; and if you can, let them have a greater variety. They want substitutes for the worms and insects. Now, the scraps of meat and fat from the table should go to the fowls. Save the draining of all the glasses, pour them together, and sweep all the crumbs, and odd corners of bread into it. Feed the birds often, and, if there is snow, sweep a clean place, and feed there. Never feed any kind of bird in such a manner that they shall pick up snow with their food; it is a strong medicine to them. The lark that fattens in two days on the white hoar-frost, becomes a wretched skeleton after two days' snow.—*Cottage Gardener*.

ALL highly concentrated animal manures are increased in value, and their benefits prolonged, by admixture with plaster, salt or by pulverized charcoal



## MUTTON THE MEAT FOR FARMERS.

THE cheapest meat for farmers is mutton. It may safely be said it costs nothing. The wool that is annually sheared from the body of every sheep, richly pays for its keeping. In this climate it costs less to keep sheep than at the North, on account of the shortness of our winters. Then there is the increase—an item of great importance. The increase is so much clear profit. From this increase the farmer can get all his meat for the year, if he likes. Or, he may save the lambs and take some of the older sheep in their places.

The pelt of the sheep, if killed for mutton, is also saved and sold, which is worth nearly as much as the sheep would sell for.

It is also the most convenient meat to have on hand. In the warmest weather a farmer can take care of one sheep after being killed, without letting it spoil. With beef this is not so easy.

One hand can kill and dress a sheep in an hour. It takes but little time or trouble to kill a sheep, not near as much as to kill and dress a hog or a beef. On account of convenience and economy, we say keep sheep and live upon mutton.

We have said nothing about its being the healthiest food. This is admitted. It needs no arguments or facts to prove it. It is true that pork is the chief meat of farmers. It is the unhealthiest of all, whether fresh or saturated with salt to preserve it sound.

Let every farmer keep sheep. They are the most profitable stock on a farm. The hog's back only yields bristles while the sheep's yields downy wool. All that you feed to the hog is gone, unless you kill it, while the sheep will pay for its keep with its fleece yearly. The hog is a filthy, voracious animal—the sheep gentle as a dove and neat and cleanly.

## ASHES AS A MANURE.

EVERY farmer, orchardist or gardener should economize ashes and use them as manure. The bar of inferior soap received from the ashman is a poor equivalent for the large quantity of plant-food which he takes away in the wood ashes. There is not a crop in the garden, orchard or farm that may not be benefited by the application of ashes. They contain the ingredients of vegetable life, which have been extracted from the ground by the trees during the whole period of their growth. If ashes did not contain a single particle of plant food, they will be useful in other ways. They are a valuable solvent, and by their action on the soil dissolve silica and various acids, bringing them into a proper state to be taken up by the roots of plants. Coal ashes are an excellent top dressing for orchards and also

for flower beds, as they keep down weeds and keep the soil friable and admit the atmosphere to the roots. Wood and peat ashes may be used in the same way.

## SHOCKING CORN.

MESSRS. EDITORS: I have tried a plan for cutting and shocking corn according to the *modus operandi* prescribed by "Junius," in the September number of THE GENESEE FARMER, for 1865. The writer should have communicated his discovery to the public some twenty years ago, when farmers used to leave their corn stand out until Christmas, for all the advantage there is in his way of shocking is to make it stand a little more shaking of the wind without falling over, but in this age of progress and improvement when farmers are generally done by the 10th of November, as they are here, there is no use in shocking corn as though you meant to leave it stand out till next spring. I can make straight rows any other way just as well, and save cutting two hills at every shock. I want to husk or remove, or leave the two hills stand to mark the spot, or be devoured by the cattle. As it is, I am compelled to carry a pocket or case knife with me to sever the hills that bind my corn to earth, or stop and husk them out before I begin the shock, and then I leave such a ragged piece of ground as my boys tell me, it looks like nobody else's field. My old way was to take eight rows of corn for one row of shocks, each man or boy to take two rows and cut a handful, bringing them together, set them loose at the bottom, between the fourth and fifth row, bind them at the top, form a middle, and then cut rows ahead of the shock and the same behind it. This will make forty-eight hills to the shock. This is enough in good corn; mine turned out eighty-one bushels to the acre, in one field; in another ninety-three. In poor corn you can set the shocks as far apart as you have a mind to carry the corn, or as far as you have to go to get corn enough to make a handful. Any man that cannot set up a shock and bind it my way, so it will stand, say four weeks, had better go to some farmer's high school and learn the art and mysteries; or get a shocking machine. Some doctors have them. But my article is long enough, and I must close for the present; perhaps I may hear from "Junius" again. "Variety is the spice of life."

D. W. SAMPREL.

Northumberland, Pa.

SANDY LOAMS can be most effectually improved by clay. When such lands require liming or marling, the lime or marl is most beneficially applied when made into compost with clay. In slacking lime, salt water is better than fresh.

STABLE and shelter stock through the winter.



## ORCHARD GRASS.

EDS. GENESEE FARMER: If what little experience I have had in orchard grass will be of any service to you, it shall be freely given. Five years ago, I procured a quantity of orchard grass in your city for trial, and sowed early in April with one-third timothy and a small quantity of early clover seed. I sowed it on top of the ground immediately after finishing putting in the barley, and have since as fine a pasture as you would wish to see. It takes strong root, and grows rapidly, starts early in spring, and is ready to cut in full bloom with the early clover, by the last of June or first of July. I have counted over seventy good spears from one root. This is on very dry soil. If I were to seed for permanent meadow, I would sow one-third each of clover; timothy and orchard grass at the rate of 12 to 15 pounds to the acre.

Barley is undoubtedly the best crop to seed with. I think there would be much more orchard grass sown if it was thoroughly tested.

D. E. ROGERS.

Scottsville, N. Y.

## FARM OF HENRY WARD BEECHER.

THIS farm is at Peekskill, Westchester County, New York, about two miles from the railroad station. It contains forty acres of excellent land, and is pleasantly situated, with a southern aspect, commanding an extensive and most charming panoramic view of the Hudson River, the high and surrounding mountains, such as no one knows better how to appreciate and enjoy than the rural-loving owner himself.

When Mr. Beecher purchased the place, a few years ago, there was scarcely a fruit tree of any value upon it. Now there are twenty-five hundred choice fruit trees, most of them already beginning to bear. He has erected a large model barn, but as yet occupies the humble cottage he found upon the place, though he has made important additions and improvements.

Mr. Beecher is converting the place, to a great extent, except an extensive lawn in front of the house, into a fruit and vegetable farm. He has nearly an acre filled with Delaware and Iona grape vines. And as the trees are yet small, he has raised among them this year between seven and eight hundred barrels of onions.

Around his little cottage Flora reigns in all her glory. There is the greatest profusion of all the choicest flowers, and the whole atmosphere is redolent with their sweet and mingled perfumes.

The barn and outbuildings are well stocked with fine horses, oxen, choice breed cows, swine, fowls, &c. This autumn Mr. Beecher has been making many improvements in the drainage of his lands

and the avenue to his house, all adding greatly to the value and attractiveness of the place.

The influence of a farm conducted like this, though all farmers may not be able to adopt all the improvements that have been here made, must be of the greatest benefit to the agricultural interests of any community. And Mr. Beecher is really a benefactor to all the farming as well as religious interests of the country.—*Cor. Boston Traveler.*

## DRAINAGE.

OF all the needs of the agricultural world, drainage is the greatest. Manure has been called the steam engine of the farmer. But there is much rich soil in the world which needs no manure for a long time. There is little soil that does not need draining. The farmer can readily tell such soil. By the water that remains long on the surface; that keeps the soil long wet, without showing on the surface; that bakes after plowing, usually heavy, clayey soil. Where there is much clay, water is apt to trouble, especially where there is clay sub-soil, or where there are springs, or water oozing from the ground.

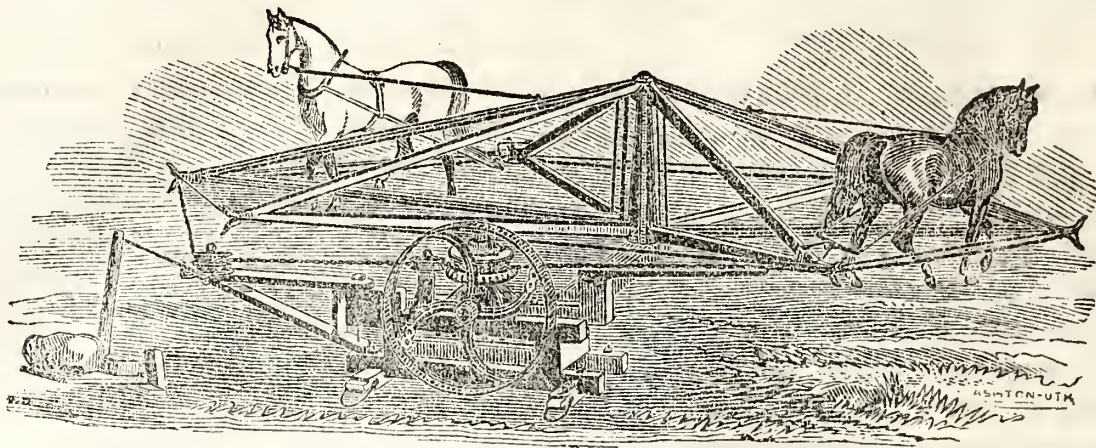
Little benefit is such land to the farmer. Grain is a loss to him if he attempts to raise it. Grass will grow; but it is not the healthy, sweet grass of the dry land; and will not so readily be eaten. Wet soil is sour. But it is also rich—richer than the dry ground surrounding it—so that when it is drained, it will yield all the more for having been wet.

The people of this and the adjoining States, are, many of them, prepared for drainage—or at least for beginning the work. They are sufficiently able—many of them—and there is no excuse to neglect the thing longer. Begin at once. Try it on a small scale first, if you lack confidence. The country—the whole country—has to come to this by and by. Why? Because it is an advantage; not an advantage merely; it is an immense benefit, adding hundreds of millions of dollars to the country at large, if secured. Why shall we neglect the advantage that is certainly within our reach? We are culpable; guilty of a wrong to ourselves; to the interest that reaches our pockets, and the welfare of our families. We leave this mine unworked! Self-interest is the first, the great principle of our nature. Here is something to stir it up, if we only knew it; knew the real benefit of draining our land.

LANDS which have been long in culture will be benefited by the application of phosphate of lime, and it is important whether the deficiency be supplied in the form of bone-dust, guano, native phosphate of lime, or marl—the land needs lime also.

DEEP PLOWING greatly improves the productive powers of every variety of soil that is not wet.





### PERRY'S AMERICAN HORSE POWER.

THIS is a sweep power, but it is entirely different both in principle and form to ordinary Horse Powers. It is the invention of Mr. Perry, of Herkimer county, and is manufactured by the justly celebrated "Remington Agricultural Works" at Ilion, Herkimer county, N. Y. The manufacturers say :

"Its efficacy rests principally upon the common sense assumption, that animal power when applied to machinery, will, other things being equal, give better net results, just in proportion as the force, and the speed with which the force moves on its *first application to gear*, approach to the exact force and speed required by that part of the machine driven which is doing the work ; in other words, just in proportion to its *directness* of application. It proceeds upon a plan precisely opposite, in principle and method, to that of the time-honored sweep or circuit powers. Upon the plan of the old powers, animal force, already much too great, if applied *directly* to the work, is made still greater by concentration and accumulation, through leverage, upon what is called the master wheel of a long train of gearing, and the speed, which in the animal was already far too slow for the work to be done, is lessened down on its first application to gear, to a movement much slower still. By such means created, an immense force, moving at very slow speed, is now to be transmitted and converted through much and heavy gear, into a light force moving with great speed.

"Is it any wonder that gear subjected to so great a strain is always giving way ?—that lubricants do so little good ?—that the teeth of the wheels are rapidly worn down by the heavy grinding of iron on iron ? that the bearings are soon worn out or displaced ? Is it any wonder that through such a circumlocution more than one-half of the whole animal power should be lost on the very machinery of the Horse Power itself, through the excessive friction of its parts ? Theoretically this great loss of power can be readily demonstrated—practically, it is shown every day by the achievements of the new power."

The accompanying illustration will give a good

idea of the construction of this New Horse Power. The wheel is simply a chain placed on iron forks at the ends of the levers, and instead of running slower than the horses walk, as in ordinary sweep powers, it runs somewhat faster, and is applied directly to the gear. It is claimed that both in theory and practice it runs easier than the endless chain-or tread powers, and still more than the ordinary sweep powers.

"By experiment, it has been found that the weight of one pound drawing at each point of the large driving wheel of the new sweep, where a horse can be attached, will more than balance the friction against the centre-post caused by the average draft of a horse drawing at each of these points, when the full duty required of the horses is being performed. This average draft, for a single horse, working ten hours a day on the machine, ought to be not far from 125 pounds. Therefore, there need be only the 125th part of the animal power lost by the friction of the large driving-wheel, for each horse employed. Compare this with the friction caused by the weight of the endless treadle, added to nearly the entire weight of a horse on the multitude of small wheels commonly used in the construction of the railway, the chain of the treadle supposed in the experiment to be disconnected from the pinion which it drives, and there is no chance for a difference of opinion in regard to which has the advantage, so far as these parts of the respective machines are concerned.

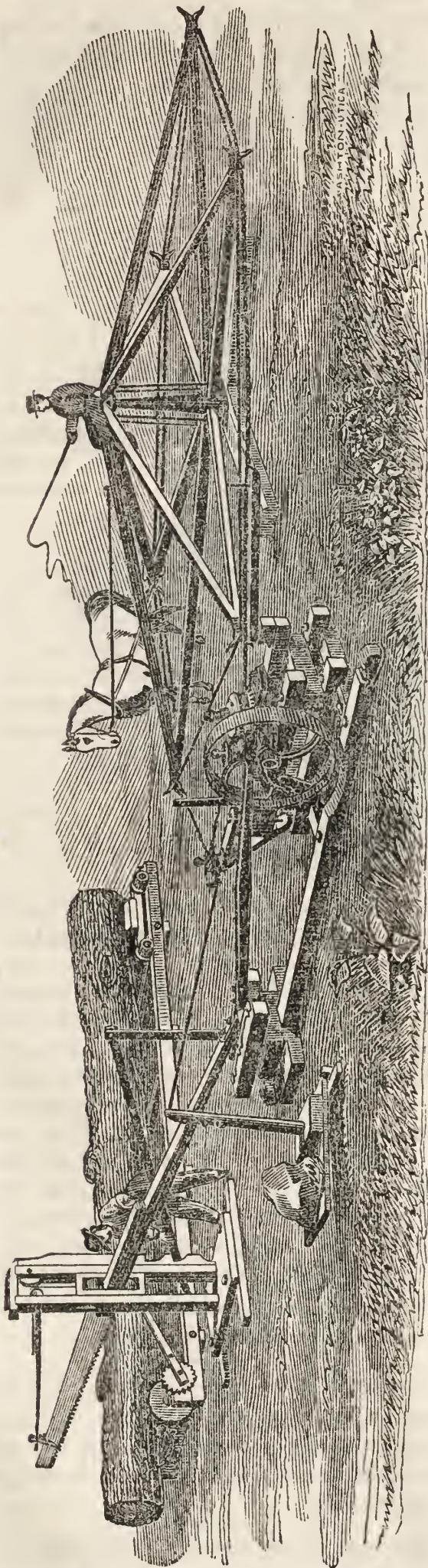
"A comparison of the other working parts of the two kinds of machine will show further gains.

"The large horse-wheel of the new sweep drives an endless chain, which in turn drives a pinion, very much in the same way that the endless chain of the railway drives a pinion, with this important difference, however, that the teeth of the former pinion are driven with considerably greater speed than the teeth of the latter. Hence the animal power is more *directly* applied in the former to the work to be done, thereby requiring less gear, consequently,



with a similar construction of parts beyond, less loss through friction."

#### HORSE POWER MACHINE FOR SAWING LOGS.



For proof of these statements the manufacturers refer to the testimony of men who have thoroughly tried both powers, and which is given in a pamphlet that will be sent to all wishing further information on the subject.

This new power can be used for a great variety of purposes. We have used it for threshing (with six horses,) for grinding grain, for cutting straw and corn stalks, for grinding apples, for turning grindstone (with a light horse,) for sawing wood with a circular saw, and for sawing wood from the log with a drag saw. In fact, it can be used to drive a small churn or a large threshing machine.

As at this season of the year, and especially now that wood is so high and choppers scarce, many farmers are looking for a machine to saw wood, we give on the preceding column an illustration of the machine set for sawing wood in the log. The arrangements for this are most admirable, and recently the manufacturers have introduced an improvement by which the log can be moved forward without stopping the horses.

If desired, a circular saw (see cut on the next page,) can be run at the same time as the drag saw, and is very convenient for sawing up limbs, &c. Having used the Horse Power, Drag Saw and Circular Saw for over a year, we cheerfully bear testimony to the excellency of the workmanship and to the efficiency of the machines.

The manufacturers claim the following "Points of superiority over all other horse powers as practically proved:"

1. It occupies much less room for stowage when not in use.
2. It is less heavy and cumbersome—more portable.
3. Can be snugly packed on a common one-horse wagon, and not a heavy load for one horse to draw.
4. Any part can be readily lifted, and loaded, by two men.
5. Not at all liable, like other powers, to be racked or injured by moving.
6. Is very quickly and easily set up for work.
7. No joints loosened by setting up and taking down, no matter how often done.
8. Will cost less for oil, lard, or tallow, to run it.
9. Will cost less for repairs, on account of natural wear; and will last longer.
10. Not nearly so liable to serious breakage from great or sudden strains.
11. Home blacksmithing or carpentry will suffice for almost any carelessness.
12. No danger of long suspensions of work on account of break-downs.

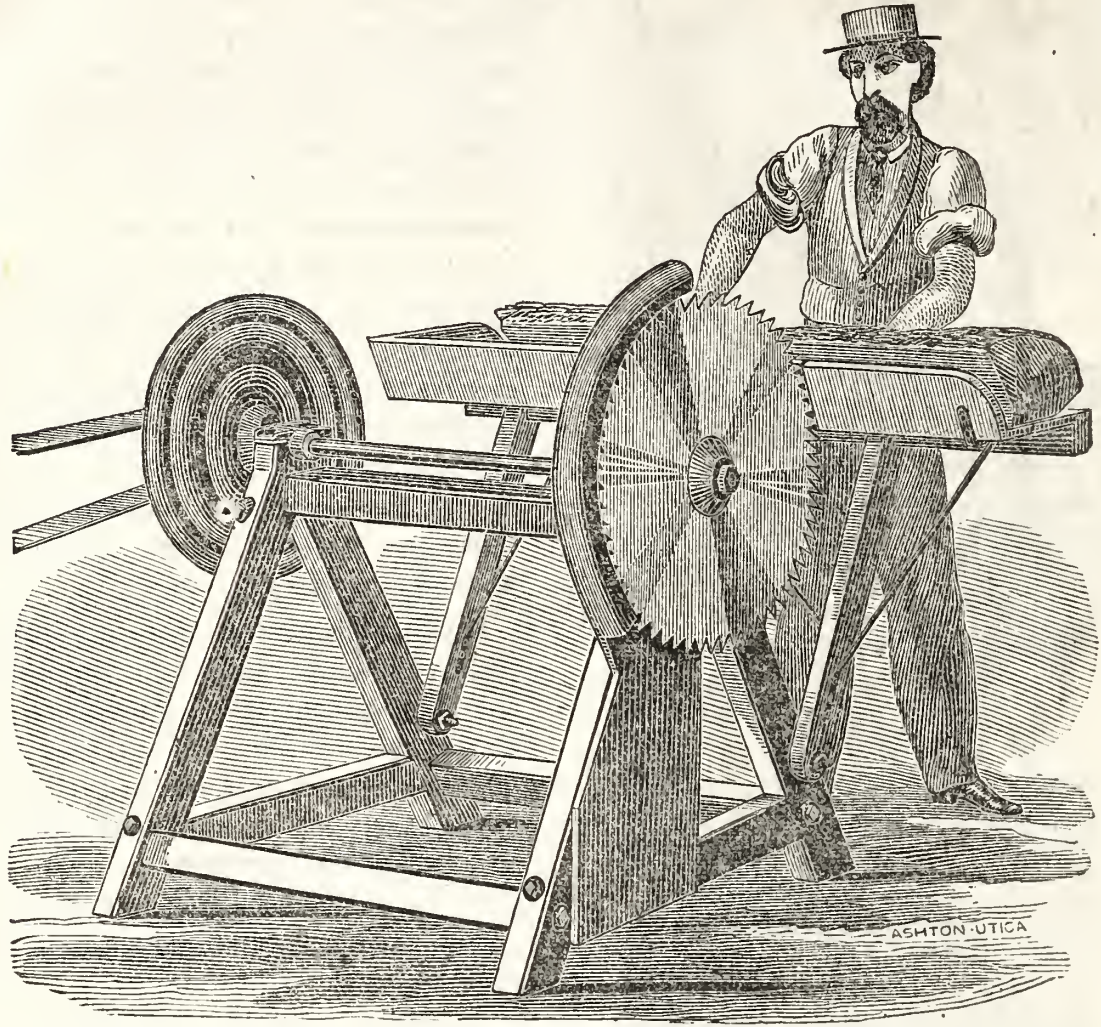


13. Has no bridge, rod, belt, or any other part of the machine for the horses to step over every turn they make, like all other field sweep powers—a great advantage.

14. Will do double the work of other sweep powers with the same team.

15. Will do more work with the same team than any tread power, and is much more pleasant and safe for the horses.

16. Is the lowest priced of any power in the market, capable of doing, either, an equal variety or an equal amount, of work.



#### QUALITIES OF THE ONION.

THE onion deserves notice as an article of great consumption in this country, and it rises in importance when we consider that in some countries, like Spain and Portugal, it forms one of the common and universal supports of life. It is interesting, therefore, to know that, in addition to the peculiar flavor which first recommends it, the onion is remarkably nutritious. According to analysis the dried onion root contains twenty-five to thirty per cent of gluten. It ranks, in this respect, with the nutritious pea and grain of the East. It is not merely as a relish, therefore, that the wayfaring Spaniard eats his onion with his humble crust of bread, as he sits by the refreshing spring; it is because experience has long proved that, like the cheese of the English laborer, it helps to sustain his strength, also, and adds—beyond what its bulk would suggest—to the amount of nourishment which his simple meal supplies.

NEVER use spring water for watering plants, if you can get other.

#### CULTIVATION OF TEA IN GEORGIA.

A MAN who has been cultivating tea as an experiment, since 1860, writes to the *Savannah Herald* that most of his plants grow finely, that his tea is of good quality, and that the plants will do quite as well in Georgia as in their native country. The plants require no culture after the third year. If well taken care of, by that time they will be large enough to commence the manufacture of tea from them. The yield to the acre is from three to four hundred pounds, and the plants produce good crops for eighteen or twenty years. The growth of tea is not affected by dry or wet weather, or by storms, and insects will not molest the plants.

BY STABLING and sheltering stock through the winter, a saving of one-fourth the food may be affected; that is one-fourth less food will answer than when the stock is exposed to the inclemency of the weather.

TAKE care of the plows. While they are idle during the harvest, see that they are well cleaned.





### THE APPLE CROP OF WESTERN NEW YORK.

FORTUNATE is that man who has a bearing apple orchard. The produce of three or four acres this season will pay for a farm. See that load of barrels go past, seven on a side and six on the top! Well may the driver look jolly! He has contracted the apples for \$5.00 per barrel, and will come back with a hundred dollars in his pocket for that single load, and will take in another this afternoon. We used to say, "Rich as Ceresus;" latterly we have said, "Rich as an oil-man;" now we shall say, "Rich as an apple grower!" A good orchard pays better than Western Union Telegraph stock, and a flowing oil-well pales in the presence of a cider mill! The produce of a Baldwin apple tree will pay the taxes of a whole farm. Mortgages will be paid, barns repaired, homes painted, sheds erected, underdrains dug, and trees planted by the thousand—all from the proceeds of a single apple crop.

This is no fancy sketch. The failure of the apple crop in the Eastern States has sent up prices higher than ever before known; and as in this section we have a fair crop, our farmers are reaping a rich harvest. Early in the season buyers came round and made contracts at from \$4.00 to \$5.00 a barrel. The trees were bearing only a moderate crop, and it was thought the yield would be light. But, owing probably to the fact that there were comparatively few on the trees, the apples have proved unusually large and good, and have turned out much better than was anticipated.

It is the general impression that some of the dealers have "burnt their fingers"—that the high prices will lessen consumption, as high prices always do. But there can be no doubt that, except in this section, the apple crop is unusually light, and in many places it is an entire failure. In some parts of New England that we have heard from, there is scarcely an apple, and if this should prove to be generally the case, apples will command high rates. A barrel holds less than two hundred ordinary sized apples, and by the time they get to the consumer in the Eastern States must cost at least five or six cents a piece!

The climate of Western New York is unquestionably highly favorable for the growth of apples. Failures, owing to the proximity of the lake, are quite rare; and of late years the crop has been disposed of readily at paying rates. No wonder that young orchards of five, ten, twenty, or even fifty acres are springing up in all directions. Will the business be overdone? The general impression is that it will not. So far, certainly,

the supply, although planting has been going on extensively for many years, does not keep pace with the demand. There may be seasons—we remember such—when apples were plentiful all over the country, and they were difficult to dispose of in this section at 75 cents a barrel; but as a general rule, a good apple orchard, when properly attended to and the fruit marketed in the right condition, has paid better than any other portion of the farm.

### TRAINING CUCUMBERS.

IN small gardens where it is desirable to make the most of the land, cucumbers can be trained to trellises or on a fence, and will yield an abundant crop without occupying any land except the hill on which they grow. This plan we have seen adopted for years with success. A correspondent of the *Utica Herald*, Mr. George Balis, of Whitesboro, New York, says:

"I have tried (to me) a new way of training cucumbers. I planted on the embankment under a buttry window in my yard a hill of cucumbers on the 25th of June, 1865, and when they came up, I commenced training them up the side of the house, but soon found that all but one plant was dead, and that one continued to grow and bear, and when the frost struck them on the 27th of September, 1865, we had picked 102 nice cucumbers. The vine continued to grow and bear until it reached the eaves of the house, about ten feet high, and covered the window nicely; and many of the cucumbers were picked from the inside. I consider this as economical a way to raise this kind of vegetable, as to land and labor, as any that can be desired."

### FRUIT TREES vs. RABBITS.

MANY have been the preventives recommended, to keep rabbits from barking and thereby destroying, or at least seriously injuring young fruit trees. Let me add another which I know, by long experience, to answer perfectly the desired object, without subjecting the trees to the injurious influences consequent to some of the most prominent methods (as wrapping with paper, or rubbing with soap, liver or other offal from slaughtered animals;) beside it is cheap, permanent, and within the reach of every one.

Take the lower end of corn stalks, about twenty-four inches long, and split through the center, place them around the stem of the tree (pith inside) until the same is encircled, and fasten with a small cord six inches from each end.

Your tree is now safe during the winter from rabbits. Besides, it affords an efficient and healthy protection from the extremes of weather, without accumulating moisture to the stem or preventing access of the air to the bark. Try it, and success will be the consequence. —C. T. Mallinckrodt, in *Rural World*.

DISTANCE APART FOR STRAWBERRIES.—I invariably plant in rows and never in beds. I hold that the objections to planting in beds are so great and so palpable, that it will admit of no discussion whatever. My standard rule is to plant in rows three feet apart, and plants two feet in the row.—*Cor. Hort.*



## Miscellaneous.

### TEARS, IDLE TEARS.\*

Tears, idle tears, I know not what they mean,  
Tears from the depth of some divine despair  
Rise in the heart, and gather to the eyes,  
In looking on the happy Autumn-fields,  
And thinking of the happy days that are no more.

Fresh as the first beam glittering on a sail,  
That brings our friends up from the underworld,  
Sad as the last which reddens over one  
That sinks with all we love below the verge;  
So sad, so fresh, the days that are no more.

Ah, sad and strange as in dark summer dawns  
The earliest pipe of half-awakened birds  
To dying ears, when unto dying eyes  
The casement slowly glows a glimmering square;  
So sad, so strange, the days that are no more.

Dear as remembered kisses after death,  
And sweet as those by hopeless fancy feigned  
On lips that are for others; deep as love,  
Deep as first love, and wild with all regret,  
O Death in Life, the days that are no more.

LORD SHAFTSBURY recently stated, in a public meeting in London, that, from personal observation, he had ascertained that of the adult male criminals of that city nearly all had fallen into a course of crime between the ages of eight and sixteen years; and that if a young man lived an honest life up to twenty years of age there were forty-nine chances in favor and only one against him as to an honorable life thereafter.

A CONNECTICUT officer sends the *Hartford Courant* some "poetry" which was found in a rebel camp at Resaca, Ga., and is entitled the "Rebel Soldier." This is the first mournful verse:

"I will eat when I am hungrey I will drink when get dry  
If the yankis don't cill me I will live till I di  
If Molly forsakes me it will cause me to moarn  
I am a rebel soldier a long wayes from home."

Two gentlemen were riding in a stage coach, when one of them, misplacing his handkerchief, rashly accused the other of having stolen it; but soon finding it, had the good manners to beg pardon for the affront, saying it was a mistake; to which the other replied, with great readiness, "Don't be uneasy, it was a mutual mistake; you took me for a thief, and I took you for a gentleman."

A GENTLEMAN, not long since, wishing to "pop the question," did it in the following singular manner:—Taking up the young lady's cat, he said—"Pussy may I have your mistress?"

It was immediately answered by the young lady who said—"Say yes, Pussy!"

A passing traveler in the backwoods of America meets with a settler near a house, and inquires:

"Whose house?" "Mogg's." "Of what built?" "Logs." "Any neighbors?" "Frogs." "Your diet?" "Hogs." "How do you catch them?" "Dogs."

\*Songs for all Seasons. By ALFRED TENNYSON. Boston: Ticknor & Fields.

THE FRENCHMAN AND THE YANKEE.—A Yankee and a Frenchman owned a pig in copartnership. When killing time came, they wished to divide the carcass. The Yankee was very anxious to divide so that he should get both hind-quarters, and persuaded the Frenchman that the proper way to divide was to cut it across the back. The Frenchman agreed to it on the condition that the Yankee would turn his back and take choice of the pieces after it was cut in two. The Yankee turned his back and the Frenchman asked:—"Vich piece vill you have; ze piece wid ze tail on him, or ze piece vat aint got no tail on him?" "The piece with the tail!" shouted the Yankee instantly. "Den by gar you take him and I take ze oder one," said the Frenchman. Upon turning round, the Yankee found that the Frenchman had cut off the tail and stuck it into the pig's mouth.

RECEIPTS THAT NEVER FAIL.—To destroy rats—catch them one by one and flatten their heads with a lemon squeezer.

To kill cockroaches—get a pair of heavy boots, then catch your roaches, then put them into a barrel, and then get in yourself and dance.

To kill bed bugs—chain their hind legs to a tree, then go round in front and make mouths at them.

To catch mice—on going to bed put crumbs of cheese into your mouth, and lie with it open, and when a mouse's whiskers tickle your throat—bite.

To prevent dogs going mad, cut their tails off just behind their ears.

SWEET GIRLS.—A man traveling at the West declares the wind came to him so laden with fragrance that he thought he was near a garden of roses. He discovered that it was only a bevy of girls going through the woods.

WHEN a lover wishes to "pop the question," he can hint his desires in a thousand different ways. Here is one of the latest cases:

"Please take a half of this poor apple?" said a pretty damsel to a swain the other evening.

"No, thank you; I would prefer a better half!"

Eliza blushed, and referred him to "papa."

"How fortunate I am in meeting a rain beau in this storm," said a young lady who was caught in a shower the other day, to her beau of promise who happened along with an umbrella.

"And I," said he, gallantly, "am as much rejoiced as the poor Laplander when he has caught a rein dear."

"I SAY, Sam," said a negro employed in carrying up bricks to a building, addressing a brother darkey, whose avocation was making ice creams; "why does you follow such a cold bus'ness? It wouldn't be genial to my Suddern feelens." "Well, fac is I follar it, Ben, case you sees I'se a Suddern man wid Nordern principles."

If a darkey says, "I go for dis Union!" is he a disunionist or not? Dat am de question.



## Ladies' Department.

### POLITENESS TO SERVANTS.

AN intelligent writer believes that much of the difficulty experienced with servants springs from bad government on the part of mistresses. Some of the suggestions of the article are worthy of consideration. It says: "In dealing with servants, our readers must not infer that we would advocate the abolishment of any proper distinction between the employer and the employed; we are very far from intimating that it is the duty of the mistress to make companions of her servants, or encourage them to anything more than a most respectful familiarity. Our deportment, as men and women, should be such toward all that they would feel the utmost freedom in communicating with us in regard to plans for their prosperity, and about all their troubles. An undue familiarity, a patronizing manner on the part of the mistress, will surely degrade her in the eye of her servant. We should ever be polite to all subordinate to us. The obligation to be so to such is greater, if possible, than to those who are equals or superiors in social status; all this is perfectly consistent with a course that would ever command the most perfect deference. I have known many gentlemen and ladies whose annual incomes were fortunes, who observed the utmost politeness toward their servants; and it needs but a slight knowledge of human nature to enable one to see that this course is to an extent a guarantee for the good behavior and good will of the servant. Look at facts in families where the servants are so treated, and our inferences will be shown to be just. A haughty demeanor, a disregard of the amenities that are so agreeable to us, are quite certain to work very unfavorably, and lead to be reckless of the feelings and interests of their employers. We have admitted that our servants, as a class, are bad enough, but we sincerely believe that incivility, insubordination, and dishonesty are very much more likely to, and do, as a matter of fact, much more generally occur in families where the unquestioned rights of servants are ignored. Every servant has a clear claim to kind, polite treatment, or, in other words, our deportment toward them should be guided by the injunction—'Whatsoever; therefore, ye would that men do to you, do ye also unto them.'"—*Godey's Lady's Book*.

### A CHRISTMAS PASTIME.

#### THE GYPSIES.

THIS will prove a very amusing and merry game, if conducted well, which will depend entirely upon the wit and cleverness of the actors. The persons who invite the party must select—some days previously—one gentleman and two ladies to represent gypsies, and these must not be known to the guests till after the performance. They will have time to study their parts. If the house has two rooms separated by folding doors, the smaller can be appropriated for a tent, &c., and, as evergreens will be plentiful, it may be very tastefully decorated to represent a gypsies' encampment, their

tent being at the entrance of a wood or copse. It can easily be erected against a wall, and a covering thrown over it, as the gypsies need not go under it, but recline themselves before it. They must prepare suitable dresses, and slightly color their faces to appear tanned. When the evening arrives, they must be fully prepared. Possibly the guests may take tea before the performance, the hostess taking care not to forget them. When the repast is over, the host may say: "Well, friends, how shall we amuse ourselves?" His wife leaves the room, goes into the other by a side door, and throws open the folded ones. The party appear electrified at the novel sight; the gypsies do not allow them time for consideration, but jump up. The male, taking possession of a young lady, compliments her on her beauty, and begs her to let him tell her fortune. His companions select young gentlemen, and they are told marvellous things. The host should have invited at least one decided old bachelor, two the better. Then the gypsy lasses must praise up matrimony, telling them they would be caught at last, and in their old days rock the cradle, and sing to their son and heir; may even give a description of their intended wives, describing some of the ladies present, which will cause a great deal of mirth. After the game is finished, the gypsies are invited to supper. They do not change their dress, but keep *incog.* during the evening, and after the guests have left, change their dresses, and set off themselves in a car.—*Ibid.*

### DOMESTIC RECEIPTS.

**A CHRISTMAS PLUM PUDDING.**—Take half a pound of finely grated bread crumbs, and half a pound of fine flour, mix them well together; one pound of suet chopped small, one pound currants, one pound of the best raisins, stoned and chopped slightly, the yolks of eight eggs, and the whites of four well-beaten, half a pound of brown sugar, half a nutmeg grated, one teaspoonful of beaten ginger, two ounces of sweet almonds, quarter pound of candied citron, quarter pound of candied lemon, quarter ounce mixed spice, the grated rind of a lemon, and three-quarters of a teaspoonful of salt, one wineglass of brandy, and the same of port wine. Mix all together, adding to the eggs as much milk as will make the pudding a proper consistency, remembering that when mixed it must be thick. Boil five hours, and before serving pour another wineglassful of brandy gently over the pudding.

**TEA CAKES.**—Six eggs, leave out the whites of four; three-quarters of a pound of loaf sugar, half a pound of butter; one teaspoonful of soda dissolved in a large spoonful of vinegar. Flavor with any essence you may like best. Make into a soft dough, and roll thin and cut in shapes.—*Godey's Ladies' Book*.

**THICK CURTAINS** drawn closely around a bed are very injurious.

**SILK GOWNS** should have the dust shaken from them when taken off.

**LET** friendship creep gently to a hight.





Notes on the Weather, from June 1 to Nov. 1.

In a brief abstract of the weather of the growing season, the degree of heat is of the greatest importance, because its effects are seen or felt in so many particulars. To compare with other years, we must have the mean temperature.

The mean heat of			
first half June	68.4°	second half,	71.8° and the general
average “ “	63.3	“	69.1 of month 70.1°
July	68.3	“	68.9
average,	70.2	“	71.0 68.6
August,	70.8	“	65.2
average,	70.1	“	67.2 67.9
September,	72.7	“	61.3
average,	64.1	“	57.0 67.0
October,	51.7	“	42.2
average,	51.3	“	45.0 46.8

Half months and of the months, and the general average for 29 years, is in the following table :

	First half	Second half	Month
June,	68.4°	71.8°	70.0
general ave.	63.3	69.1	66.2
July,	68.3	68.9	68.6
average,	70.2	71.0	70.1
August,	70.8	65.2	67.9
average,	70.1	67.2	68.6
September	72.7	61.3	67.0
average,	64.1	57.0	60.6
October,	51.7	42.2	46.8
average,	51.3	45.0	48 0

We see in the table, that in June the temperature was above the average; in July, below the general average; in August, just below; in September, much above; in October, a little below. We see also that the first half of September was hotter than any half of the last summer months; that the mean heat of June was greater than that of the summer months; and the mean of September was nearly equal to that of August.

The following table shows the temperature of the hottest noon and coldest morning, and of the hottest and coldest days in each half month :

	hottest noon	coldest morn.	hottest day	coldest day
June, first half,	90°	57°	78.0°	61.6°
second half,	90	57	79.3	61.0
July	94	54	77.0	57.7
	84	56	78.3	61.0
August,	91	55	82.0	58.0
	88	50	77.7	65.7
September,	88	63	78.7	65.7
	76	42	76.0	50.7
October,	69	35	63.0	43.6
	54	37	52.0	35.3

This table shows that we have had as high heat as commonly occurs in our summer months, the hottest being 94°, and that only once; but sometimes we have 96° to 98°. June, 1864, was very hot in its last half, being 74.7°.

Mean heat of summer months, 1865, 68.8°. General average for 29 years, 68.3°. Mean heat of summer months, 1864, 70.5°. General average, 68.4°. Mean

heat of summer months, 1863, 68.6°. General average, 68.3.

The water to June was 14.07 inches, and since to November, 16.56. In June, 5.43; July, 1.47; August, 1.04; September, 4.33; and in October, 4.29 inches. Last year the partial drouth was in June, and July especially; this past summer the drouth was in July and August, and especially in August. The springs were not so low as they sometimes have been, but the surface was really burned brown or gray. The grass in pastures nearly failed over a large extent in this State, and scorched others. August closed with its hottest noon of the last half, 88°, and the day averaged 77.7°, and the heat extended into September four days. The heat was parching, but on the 5th, at noon, a thunder shower changed the sun; a half inch of water soon fell, and more in due time. By the 12th such a rich vegetation covered our fields as we have rarely seen so short a time. The harvest was saved; the whole in country and city rejoiced. The latter harvest has been far greater than had been expected.

The earth has given abundance. Potatoes and fall vegetables plenty. Peaches were unequally distributed, but an excellent supply; plums some considerable; quinces enough; apples and pears in abundance, indeed the growth of this crop, after the drouth was closed in September, was altogether beyond sanguine anticipations. Goodness and mercy have followed us. Let our hearts rejoice and praise the bounteous Benefactor.

The Cattle Plague in England.

A correspondent writes the *Gardener's Chronicle* as follows :

“By a letter from a friend just received, I learn that the ‘Rinderpest’ now prevailing here, has attacked his beasts suddenly, with great malignity, some 300 miles north-east of Sydney, and reports have reached us from the Neilgherries of the cattle dying there of the same disease, and instances are not wanting in England where the murrain has appeared in localities far removed from all sources of contagion or infection.

“Further proof is not needed of this visitation being universally epidemical and originating in some altered condition of the atmosphere, and hence all our precautionary measures, even with exclusion of all foreign animals from the kingdom (wise and necessary as such measures may be in the opinion of many), may not save us from invasion; and I hold to my oft-expressed belief, that this disease might fall upon us at any moment.

“We know literally nothing respecting the laws governing epidemics, and many may remember how the profession stood aghast on the first appearance of cholera in England, and how sorely baffled we were in all our attempts to account for the many novel circumstances attendant on its progress. We saw one side of rivers depopulated, while the other side was safe from the scourge—one side of a street suffering in all the malignity of the pestilence, while the other side continued comparatively healthy—a village without a single case, between two other villages sorely smitten.



"To every inquiry I had but one reply, 'I know nothing about it;' and up to the present moment, were I now in practice, truth would compel me to give the same answer. We all had some opinions on the subject, I had mine, and they still have a hold on my imagination. Now, I know of no possible disturbing cause so capable of affecting generally the conditions of our atmosphere as electricity. We have ample evidence of its mighty and all-pervading influence throughout the universe. I pretend to no satisfactory knowledge on this point, and I am unwilling to trespass much longer on your patience. I know that for the last thirty years we have scarcely ever been free from some sort of epidemical visitation, either in the vegetable or animal kingdoms, and our seasons have been disturbed by most unusual variations, and it is my firm conviction that until we become far more conversant with electrical laws, and some of those undoubted influences exerted by electricity on our atmosphere, we shall remain as much in the dark as physiologists in regard to the causes of many of our most important diseases, and our profession would do well to take the torpedo and gymnotus into their deliberative councils, to lighten their darkness, and set them free from the bondage of quackery.

"I believe the disease will prevail so long as the atmosphere is in its present epidemic disposition. At first most cases end fatally, as its highest point of malignant saturation usually continues three or four weeks, after which the vis medicatrix (if not impertinently interfered with) will prevail, and the nervous forces will resume their proper play, when, with appropriate food made slightly stimulant by spices and the aromatic spirit of ammonia, pure air and exercise will be all that is wanting to set the poor creatures on their legs again."

#### Inquiries and Answers.

HOW MUCH COARSE WOOL DO WE IMPORT?—(G. F. W.)—We do not know how much we have imported from Canada the present year, but unquestionably a large amount. Perhaps some of the readers of THE GENESEE FARMER can give us the figures. From Great Britain, during the first eight months of this year, we imported of English grown wool, 105,104 pounds; and during the same month of 1864, 716,154 pounds; and during the same in 1863, 600,770 pounds.

MERINO SALE.—Isaac V. Baker, Jr., and E. W. Harrigan, of Comstock's Landing, New York, recently purchased of Edwin Hammond, two very valuable ewes—one is a seven year old ewe dam of the famous ewe "Dolly" now owned by Mr. Hammond; the other is a very promising yearling ewe. They are said to be the most valuable ewes in the State.

BACK VOLUMES OF THE FARMER AND RURAL ANNUAL.—These can be obtained on the old terms by addressing Orange Judd & Co., *American Agriculturist*, New York. They are the cheapest agricultural works now printed, and we hope all our friends who have not a complete set will lose no time in securing it.

#### The Markets.

THERE have been some important changes in the market since our last report. The one of most importance to farmers at the present time is *the decline in pork*. Last month we quoted live hogs in New York at 12@14c  $\frac{3}{4}$  lb. At the present time (Dec. 1) they are quoted at 9½@11c—a decline of 3 cents a pound. In this city dressed hogs have fallen still more. A month ago heavy hogs were sold to the butchers as high as 18 cents, while the highest sales we can hear of to-day are at 13 cents. There are many wagons in with pork, and the farmers wear long faces. They would gladly take 13 cents, but cannot get it. We have talked to several who say they will take it home and pack it rather than sell for less, and this is precisely what we advised them to do. Shippers east offer but 10 cents. They say 11 cents a pound is all they can get in Albany, and the freight costs 80 cents a cwt.

This state of things is repeated every year. Farmers get frightened as they see the corn disappear, and kill before the pork packing season fairly opens. The market is gutted. The packers and dealers combine to force down the price, and the papers to often, unintentionally perhaps, play into their hands. Farmers should not kill till good steady cold weather sets in, when there is usually sufficient competition to secure fair prices.

Poultry, like pork, in this city is dull. Turkeys bring but 16c and chickens 14c  $\frac{3}{4}$  lb. In New York dressed turkeys are quoted at 22@25c  $\frac{3}{4}$  lb.; fowls 20@22c, and choice chickens 25c; geese 16@18, and ducks 25c  $\frac{3}{4}$  lb.

Potatoes here bring from 55c to 65c per bushel, and onions the same. Turnips 40c.

Wheat is a little higher, the advance since last month being about 5c per bushel. Red winter brings \$2.10@2.15 and choice white \$2.50. Corn 90@95c. Barley \$1.00@1.05. Oats 45@50c. Rye 85@90c. Buckwheat 90c@\$1.00. Sheep pelts \$1.50@2.00. Wool is dull, at 50@55c. Hay \$12.00@16.00. Eggs 40c per doz.

Beans have advanced materially since our last report. They are quoted in New York, medium \$2.25@2.40; marrows \$2.60@2.70.

Butter is lower, 50c being the highest price for tubs and firkins. There is little change in cheese, the range being from 16 to 19c  $\frac{3}{4}$  lb for ordinary dairies and factory.

In New York, beef cattle still maintain their price. At last week's market fine quality beef cattle brought 18c  $\frac{3}{4}$  lb, estimated dressed weight (say 66 pounds for 100 pounds live weight.) And so down to the lowest grade at 11c. The average of the market was about 14½ cents. The same day last year the average was 13½c: so that beef cattle are a cent a pound higher than at this time last year.

Sheep, the week before last, declined ½c  $\frac{3}{4}$  lb, but this week the price advanced ½c@1c  $\frac{3}{4}$  lb. Common sheep bring 7c for the live weight and fair to extra 8@9c.

In Albany sheep bring from 6 to 8c for the live weight according to quality. The receipts are in excess of the demand.





#### Death of Dr. John Lindley.

THE agricultural and horticultural journals of Great Britain and Ireland come to us in mourning. Dr. Lindley is dead.

As editor of the *Gardener's Chronicle* he was widely known in this country. No horticultural journal had a wider influence. It was the recognized standard authority in Great Britain, and in fact throughout Europe.

Dr. Lindley's great work was the "*Vegetable Kingdom*." But the work by which he is best known in this country is his "*Theory of Horticulture*." It was edited here by the late A. J. Downing, and had an extensive sale. Dr. Lindley regarded it as his best work, but though it was translated into every European language, and was highly esteemed by those able to appreciate such a work, it attained only a limited circulation in England till 1855, when a second edition was published, and the title changed to "*Theory and Practice of Horticulture*." This second edition has not been republished here. It contains much new mat-

ter of a valuable character, but is still, notwithstanding the change of name, more scientific than practical.

From a sketch published in the last number of the *Gardener's Chronicle*, we make the following extracts giving an account of his early life. The example of a poor boy who works his way from a quiet garden nursery in Norfolk to be Vice President of the London Horticultural Society, with Prince Albert for President, and who enjoyed the confidence and esteem of the best men of his age, deserves to be held up before the minds of the young men of America. It shows what industry and talent can accomplish:

"John Lindley was born at Catton, near Norwich, on the 5th of February, 1799, being a descendant of a good Yorkshire family. His father was a nurseryman of considerable ability, and is known to gardeners as the author of "*A Guide to the Orchard and Kitchen Garden*." Dr. Lindley was educated at the Grammar School at Norwich, of which Dr. Valpy was then headmaster, Sir Wm. Hooker having been a pupil at the same school a few years before. As a boy, Lindley distin-



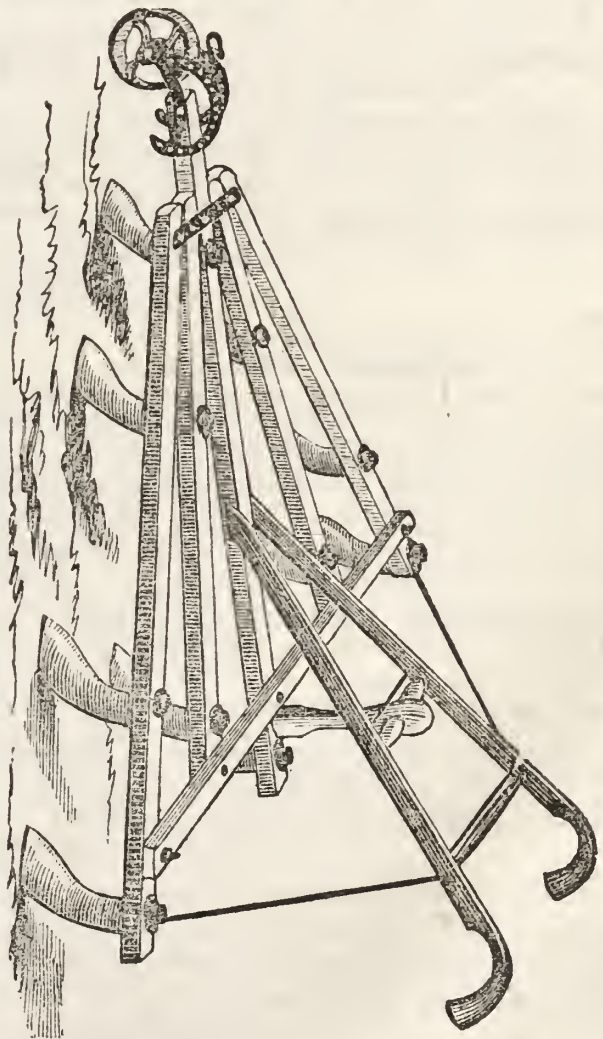
guished himself by his industry and quickness, although he had some difficulty in learning lessons by rote. At this time his inclinations led him to the study of plants and antiquities, and he is known to have spent much of his pocket money in hiring books on the latter subject, which he read with such avidity that his school-fellows bestowed on him the nickname of 'Old Antiquity.' He left school when he was about 16, and shortly afterwards went to Belgium on business for the late Mr. Wrench, of Camberwell, the well-known seed merchant. After his return from Belgium he remained at home with his father for a few years, and devoted himself indefatigably to botanical, horticultural, and entomological pursuits. His first scientific acquaintance was with Sir William, then Mr. Hooker, who was 14 years older than himself. At the time of which we speak, Mr. Hooker lived at Norwich, and was in the habit of visiting Lindley at Catton to procure plants and insects. The acquaintance was continued after Mr. Hooker's removal to Halesworth. It was at this latter place that Lindley made a translation of "Richard's Analyse du Fruit," setting himself to his task with so much devotion that he completed it at a single sitting, having worked at it for three days and two nights without intermission. This translation was published in 1819.

"About this time there seems to have been a prospect of Lindley proceeding to Sumatra and the Islands of the Malayan Archipelago, and in order to inure himself to a tropical climate, he walked backwards and forwards from Catton to Norwich more than once during the heat of a summer's day. On one occasion, when on a visit to Mr. Hooker, he was discovered by his hospitable entertainer sleeping on the floor of his bedroom, as a preparation for the hardships of his intended voyage. For some reason or other this project was abandoned; and owing to his father's reverses in business, Lindley was left to fight for himself. At this juncture he was introduced by Mr. Hooker to Sir Joseph Banks, and in 1818 or 1819 proceeded to London, where he was employed by Sir Joseph as his assistant librarian. Dr. Lindley always spoke in the warmest terms of the liberality and kindness of his patron, whose assistance was the more acceptable, as Lindley, to his honor be it said, had made himself responsible for his father's debts. Sir Joseph also recommended him to Mr. Cattley, who was desirous of finding an editor for the 'Collectanea Botanica,' in which many of the fine plants he cultivated were figured and described by Lindley. This work was published in 1821, and is remarkable for the faithfulness and beauty of its illustrations. It was dedicated to Mr. Sabine by its editor, who was even at that time able to sign himself a member of the Imperial Academy of Naturalists of Bonn. In 1820 Lindley published his 'Rosarum Monographia,' which was dedicated to Mr. Charles Lyell, of Kinnordy, the father of the present Sir Charles Lyell. Mr. Lyell was so pleased with the work that he sent the author a check for £100. With this money Lindley bought a dissecting microscope, and a small herbarium, which formed an important addition to his own collection. In 1820 he was again at Hales-

worth, and it was while searching the ditches in the neighborhood with Mr. Hooker that they found some duckweed in flower; a description of this by Lindley appeared in his friend's 'Flora Scotica,' in 1821. In the same year the Monograph on the genus *Digitalis* was published, illustrated partly by himself, but chiefly by Ferdinand Bauer.

"In 1822 Lindley became Garden-Assistant Secretary to the Horticultural Society, of which Mr. Sabine was then Honorary Secretary. At this time the garden at Chiswick was in process of formation, partly under Lindley's superintendence. This duty he performed with his usual ardor, rising early and summoning to their work those less active than himself, in order that the orchard might be planted before winter. In 1826 he was appointed sole Assistant Secretary to the Horticultural Society, having duties to perform both in London and Chiswick. From this time he may be said to have become the mainspring of the Society, upon which depended its efficient working as it advanced in prosperity, requiring his daily attendance during office hours in Regent street, or once a week at the Garden, besides frequent extra work in the early morning."

**TWO-HORSE CULTIVATORS—(WILLIAM FREEMAN)—**  
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**MISSING NUMBERS.**—If any of our readers have failed to receive any numbers of the *Farmer*, they can obtain them by writing to Orange Judd & Co., *American Agriculturist*, New York. All the numbers of the *Farmer* and *Rural Annual*, bound and unbound, have been sent to New York, and all orders will be promptly attended to.

THE *Rural Annual and Horticultural Directory* will still be published. The volume for 1866 is now nearly ready. All orders should be addressed to Orange Judd & Co., New York.

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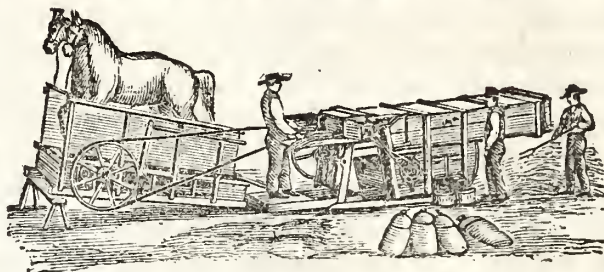
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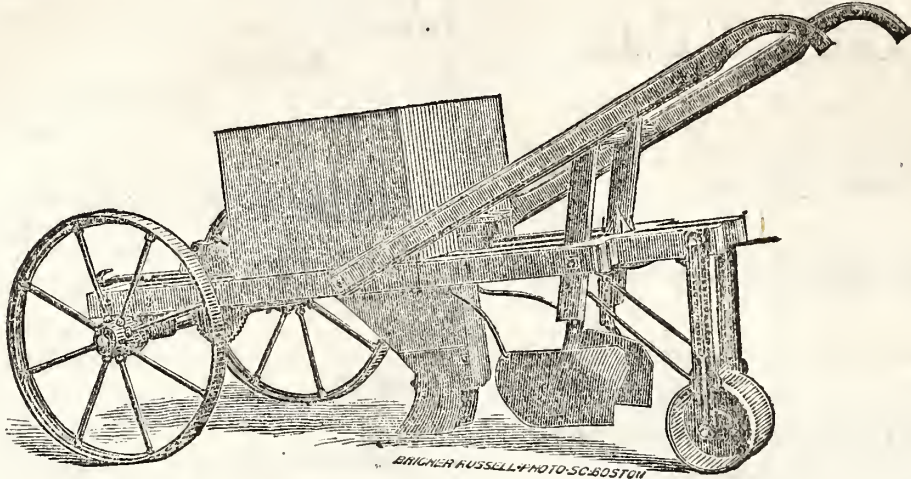
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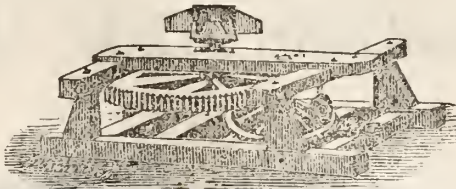
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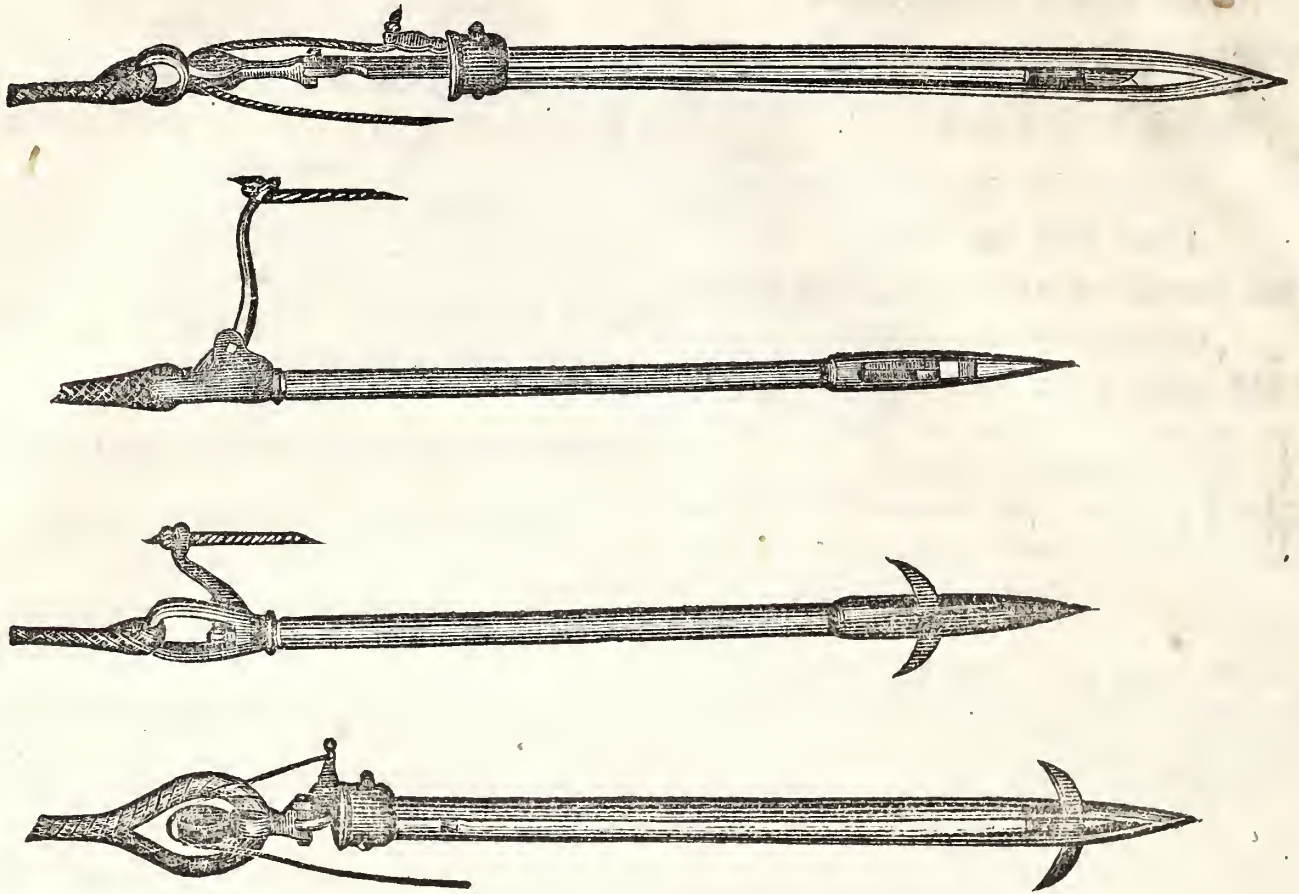
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